

Strategic Insights from 4.0 Alumni: The Importance of Pivoting

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Funding Agency:
4.0 Schools

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Suggested Citation

Young CR, Kim JG, McCallops K, Karpyn A. (April 2021). *Strategic Insights from 4.0 Alumni: The Importance of Pivoting* (Publication #T21-012). Newark, DE: Center for Research in Education and Social Policy.

STRATEGIC INSIGHTS FROM 4.0 ALUMNI: THE IMPORTANCE OF PIVOTING

EXECUTIVE SUMMARY

4.0 is the largest and earliest investor in education today. The organization focuses on building a pipeline of future innovators by making many early investments aligned with specific fellowship types. 4.0 fellowships provide limited funding (\$600-\$10,000) and training to a large number of projects, aware that not all ventures will succeed. The purpose of this study was to better understand 4.0 alumni fellow experiences with the training program and to understand key factors related to continuity of ventures supported by 4.0 fellowships. The University of Delaware analyzed alumni survey data and conducted a series of one-on-one interviews with a random sample of alumni in order to develop the following report on 4.0 alumni mindsets/skills, strengths, lessons learned, and recommendations.

This report seeks to identify critical junctures in the 4.0 process when strategic decisions could improve venture outcomes. Recent findings from the research literature on pivoting provide a useful theoretical framework for this work. Pivoting, a concept increasingly applied in the field of social entrepreneurship, is defined by Reis (2011) as “a structured course correction designed to test a new fundamental hypothesis.”

Alumni Survey

Survey data from 285 alumni were analyzed to explore how often different groups of alumni reported applying 12 mindsets/skills. Alumni with active ventures were significantly more likely to report “Always” or “Very Often” applying five of 12 mindsets/skills tested, compared to both alumni with inactive ventures and alumni who participated before a venture idea was required. For six of 12 mindsets/skills tested, there was a gradient associated with applying mindsets/skills (one was not statistically significant, n.s.): alumni with active ventures applied them most, followed by alumni with inactive ventures, and alumni without a venture idea applied these mindsets/skills least of all (Table 2). The key mindsets/skills significantly associated with active ventures were: 1) Identifying assumptions you might be making; 2) Sharing an idea with people who have not heard it before; 3) Breaking down a problem and testing it in multiple ways; 4) Understanding how tiny tests apply to the bigger picture; 5) Trying again after failing (n.s.); and, 6) Evaluating the strength of my connection with a community I want to work with.

Alumni Interviews

A random sample of alumni was selected from among the 285 alumni survey responses. Only alumni that had participated in 4.0 with an idea/venture were considered eligible for the interview. Interviews were conducted with 31 alumni. Interview guides included questions about background and goals of the venture, how 4.0 supported the venture, strengths and improvement areas for 4.0, and advice for 4.0. Alumni with inactive ventures were also asked about the decision

to end the venture and what supports or resources could have helped keep the venture going. Ten key thematic findings emerged from alumni interviews:

1. *Alumni found value in 4.0's commitment to deep understanding and questioning of assumptions and putting community perspectives first and foremost when examining problems.*
2. *Alumni valued 4.0 training approaches that emphasized openness, quality constructive feedback from peers, accessibility for varied backgrounds, and a sustained social entrepreneur mindset.*
3. *Coaching is a critical part of the 4.0 process, and when utilized to its full potential it becomes a key asset for fellows to launch, adjust, and meaningfully transition their ventures.*
4. *The mindsets, values and tools that fellows learned in 4.0 remain an active part of their personal and professional skillset even when a venture transitioned or closed.*
5. *Many alumni with paused, transitioned or ended ventures reach a crossroads moment where they would benefit from additional support from 4.0.*
6. *In hindsight, some fellows felt that 4.0's model is better suited for further developed ideas and people.*
7. *Several factors contributed to limited venture outcomes, including funding cuts, lack of technical expertise, and life circumstances.*
8. *Many alumni have a strong interest in staying involved and up to date with 4.0 and recommend continual emphasis and growth in this area.*
9. *Alumni frequently expressed interest in more sustained touchpoints following their 4.0 fellowship experience.*
10. *There are opportunities for 4.0 to offer guidance and alternative pathways for fellows and alumni that reach pivot points.*

Recommendations

Five main recommendations emerged from this research with 4.0 alumni:

1. *Implement Fellow/Venture Self-Assessment Question(s)*
2. *Arrange Smaller Fellow Groups*
3. *Coach on Pivoting*
4. *Develop Technology Partnerships*
5. *Strengthen Alumni Community*

Conclusions

Feedback from alumni in surveys and one-on-one interviews showed that 4.0 alumni have continued affinity for 4.0 mindsets/ skills years after participating in fellowships. Interviews with alumni exemplified the pivoting-related 4.0 mindsets/skills of: identifying assumptions; sharing an idea with people; breaking down a problem and testing it multiple ways; and, trying again after

failing. Interviews revealed 4.0's emphasis on engagement and connection to community. Alumni elevated strengths and lessons learned from their 4.0 experiences and offered specific suggestions where 4.0 itself can pivot as an organization. Interviews revealed opportunities to enrich fellow experiences, especially those who did not fully launch or sustain their 4.0 ventures, by more carefully fine-tuning the coach-fellow process and engaging coaches to specifically guide ventures that pivot, pause or stop in order to bring intentionality to those processes.

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STRATEGIC INSIGHTS FROM 4.0 ALUMNI: THE IMPORTANCE OF PIVOTING

INTRODUCTION

4.0's approach to entrepreneurship development recognizes there are many innovative ideas about how educational reach and impact can be improved. 4.0 fellowships provide limited funding (\$600-\$10,000) and training to a large number of projects, aware that not all ventures will succeed. The purpose of this study was to better understand 4.0 alumni fellow experiences with the training program and to understand key factors related to continuity of ventures supported by 4.0 fellowships. For this study, the University of Delaware (UD) analyzed alumni survey data, and conducted a series of one-on-one interviews with a random sample of alumni survey respondents. The project was deemed exempt by the UD Institutional Review Board (IRB #: 1702759-1).

BACKGROUND

4.0 is the largest and earliest investor in education today. The organization currently focuses on building a pipeline of future innovators by making diligent early investments aligned with specific fellowship types. **Essentials Fellows** receive coaching from both experts and a community of peers who push them to try a first test run of their venture idea with a mini grant of up to \$600. By the end of Essentials, fellows collect feedback from communities they want to reach and have skills to keep refining their idea. **Tiny Fellows** launch pilots that are extended field trials designed to serve ten or more youth and families for a week to a semester (e.g., afterschool program or summer camp). Tiny Fellows receive a grant of up to \$10,000 to support their ventures. After Tiny, the most promising alumni are connected with downstream partners, funders, and resources designed to help ventures scale up as new schools, nonprofit organizations, or companies.

4.0's approach to entrepreneurship development has evolved. Early on, 4.0 required entrepreneurs to quit their jobs and focus on idea development. That requirement was removed and 4.0 began focusing on developing entrepreneurs through strategic mindsets/skills development, empowerment, and support networks. By 2017, 4.0 evolved further and required that fellows have a specific venture idea as their focal point and as such, training efforts were applied to developing that venture. Today, 4.0's approach to entrepreneurship development recognizes that many ideas exist regarding how educational approaches can be improved, and not all of them will develop or continue over the long-term. By analyzing data from alumni surveys and one-on-one interviews, this report examines experiences of 4.0 alumni and seeks to identify critical junctures in the 4.0 process when a structured course of action could guide strategic decisions and improve venture outcomes. Recent findings from the research literature on pivoting provide a useful theoretical framework that directly apply to this work.

LITERATURE ON “PIVOTING”

A key facet of 4.0 is the focus on failure as a necessary part of idea development. That mindset is foundational to the concept of “pivoting” which is increasingly emerging and evolving in the research literature. Here we provide a brief summary of the term’s history, current understanding about the critical components of the term, the range in application of the term from organizational structures to the individual nature of the pivot, and how 4.0 mindsets/skills align with the concept of pivoting.

Pivoting, which was traditionally used in business settings, is now increasingly being applied in the field of social entrepreneurship (Crilly, 2018; Flechas Chaparro and de Vasconcelos Gomes, 2021). Pivoting is described by Reis (2011) as “a structured course correction designed to test a new fundamental hypothesis” (p. 149). A pivot comprises strategic decisions made either after a failure or in the face of potential failure, and leads to changes in the course of action (Flechas Chaparro and de Vasconcelos Gomes, 2021). Four stages of the pivoting process were identified as critical to idea development (Flechas Chaparro and de Vasconcelos Gomes, 2021):

- 1) Recognition
- 2) Generating Options
- 3) Seizing and Testing; and
- 4) Reconfiguration

These four pivoting stages are mirrored across 4.0 mindsets/skills, which include the following strategies, among others:

- 1) Identifying assumptions (Recognition);
- 2) Sharing an idea with people who have not heard it before (Seizing; Testing);
- 3) Breaking down a problem and testing it in multiple ways (Generating Options; Testing);
- 4) Understanding how tiny tests apply to the bigger picture (Testing; Reconfiguration);
- 5) Failing and learning from the experience (Testing; Generating Options; Reconfiguration)
- 6) Trying again after failing (Reconfiguration).

An effective pivot relies on the abandonment of preconceptions and acknowledgment of resultant new ways of seeing. While the importance of pivoting is increasingly understood and accepted, it remains a challenging concept to embrace and implement. Ries (2011) has been clear that the pivot is one of the hardest decisions an entrepreneur can face. Decisions to pivot at an individual level incorporate important cognitive aspects of awareness and change and are closely linked to examining biases. This role of pivoting has been discussed in the disruptive innovation literature. Often the examination of one’s own or the dominant logic is critical to the process of recognizing and potentially rejecting assumptions (Chesbrough, 2010).

4.0 ALUMNI SURVEY

METHODS

Over 10 weeks from October 22, 2020 to January 4, 2021, a total of 285 responses were received to the 4.0 alumni survey. Among 285 respondents, 62% (n=177) reported their ventures are still active, 20% (n=56) have ventures that are no longer active, and 18% (n=52) participated as 4.0 fellows before a venture / idea was required (Figure 1).

RESULTS

Table 1 shows select characteristics across alumni that submitted a complete survey (“Total” column), and by group (active venture, inactive venture, or alumni who participated before ventures were required). Based on these groupings, Table 1 also examines how characteristics of participants vary according to venture status. Table shading indicates which group reported the highest levels of a characteristic (green).

The table shows that alumni whose ventures are still active are most likely to identify as “promoters” of 4.0 (70.6%). Alumni that participated in more recent waves of 4.0 (i.e., since a venture idea was required) are more likely to identify as persons of color, and more likely to report generally applying 4.0 mindsets and skills in their professional lives. While all groups reported high levels of likelihood in recommending 4.0 to a friend or colleague (mean of 8.8 overall on a scale of 1 to 10), this likelihood is highest among alumni whose ventures are still active (9.0), vs. inactive (8.7), vs. those who participated in 4.0 before venture ideas were required (8.3).

Figure 1. 4.0 Alumni with active ventures, inactive ventures, or who participated before ventures were required (n=285)

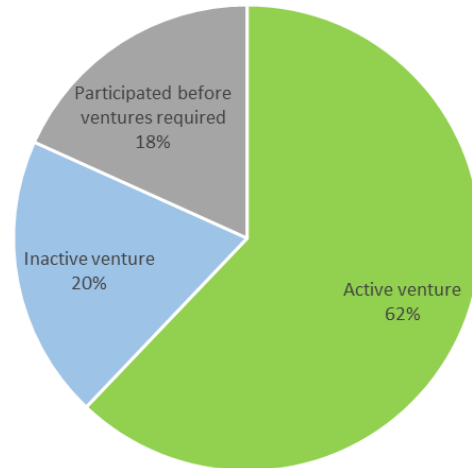


Table 1. 4.0 Alumni Characteristics by Group

Characteristic	GROUP			Total (n=285)	p-value
	Active Ventures (n=177)	Inactive Ventures (n=56)	Before Ventures Were Required (n=52)		
Identify as a person of color	52.0%	51.8%	30.8%	48.1%	0.001
Identify as “promoter” of 4.0 with friends or colleagues	70.6%	58.9%	53.8%	65.3%	0.046
Likelihood that respondents would recommend 4.0 to a friend or colleague (on a scale of 1 to 10)	9.0	8.7	8.3	8.8	0.016
Reported that the process of piloting their venture with 4.0 helped them decide whether to pilot again, pause and reflect, or stop pursuing their venture	89.3%	87.5%	n/a	88.8%	0.715
Reported generally applying mindsets and skills learned at 4.0 in their professional lives	94.9%	94.6%	86.5%	93.3%	0.170

Table 2 provides a comparison of specific 4.0 mindsets and how alumni report applying these mindsets in their professional lives across all alumni survey respondents (“Total” column), and by group (active venture, inactive venture, or alumni who participated before ventures were required). Mindsets in Table 2 are sorted from highest to lowest reported use across all groups in the “Total” column. As is the case in Table 1, Table 2 shading indicates which group reported the highest levels of applying each mindset (green); medium level (gray); and, the group with the lowest reported use of each mindset (light red). When more than one group is the same color for a particular mindset it indicates groups were statistically similar in reporting.

Alumni with active ventures were significantly more likely to report “Always” or “Very Often” applying five of 12 mindsets/skills tested, compared to alumni with inactive ventures, and alumni who participated before a venture idea was required. For six of 12 mindsets/skills tested there was a gradient associated with applying mindsets/skills: alumni with active ventures applied

them most, followed by alumni with inactive ventures, and alumni without a venture idea applied these mindsets/skills least of all.

Table 2. How often 4.0 alumni currently apply mindsets/skills they learned at 4.0 in their professional lives (Table 2 shows % that responded “Always” or “Very Often” for each mindset).

4.0 Mindsets/Skills	GROUP			Total (n=285)	p- value
	Active Ventures (n=177)	Inactive Ventures (n=56)	Before Ventures Were Required (n=52)		
Identifying assumptions you might be making	59.9%	57.1%	40.4%	55.8%	0.003
Sharing an idea with people who have not heard about it before	51.4%	35.7%	34.6%	45.3%	0.025
Asking people experiencing a problem for their feedback	44.1%	44.6%	44.2%	44.2%	0.672
Failing and learning from the experience	44.6%	41.1%	32.7%	41.8%	0.237
Breaking down a problem and testing it in multiple ways	50.3%	32.1%	19.2%	41.1%	0.000
Understanding how tiny tests apply to the bigger picture	48.0%	35.7%	21.2%	40.7%	0.001
Understanding of design thinking	35.6%	39.3%	44.2%	37.9%	0.028
Applying design thinking to a problem	38.4%	28.6%	40.4%	36.8%	0.168
Trying again after failing	38.4%	30.4%	17.3%	33.0%	0.135
Evaluating the strength of my connection with a community I want to work with	36.7%	26.8%	11.5%	30.2%	.005
Determining whether I am the best person to lead an idea	20.3%	26.8%	15.4%	20.7%	0.782
Evaluating whether I have enough experience to create or develop an idea	15.8%	25.0%	15.4%	17.5%	0.593

4.0 ALUMNI INTERVIEWS

METHODS

In January 2021, a random sample of 40 alumni was selected from the full sample of 285 responses to the alumni survey to receive an invitation to participate in an in-depth interview by a UD evaluation team member. The goal of the interview was to obtain more detailed information from both those whose ventures were continuing as well as those whose ventures were not continuing about the 4.0 process.

Alumni who reported "Yes" to the question "*Did you participate in 4.0 with an idea/venture?*" were considered eligible for the interview. Two alumni were deemed ineligible because of involvement with the research team (n=1), and because of being interviewed by the UD research team for a 4.0 early childhood evaluation (n=1). We stratified the sample of 38 eligible alumni based on the question "*Is your venture still active?*" (Yes/No). Among the 31 alumni interviewed, 21 (68%) had active ventures, and 10 (32%) reported their venture was no longer active.

Among the eligible sample, 25 alumni (66%) reported their venture was active, and 13 (34%) reported their venture was no longer active. Interviews were conducted with 31 out of 38 eligible alumni (82%). Of the seven alumni that did not participate, one declined and six were non-responsive to three separate contact attempts; these seven represented four active ventures and three that were inactive.

Two semi-structured interview guides were developed – one utilized for continuing ventures and the other for non-continuing ventures. The guides contained identical questions about background and goals of the venture, how 4.0 supported the venture, strengths and improvement areas for 4.0, and advice for 4.0. The only distinction was inclusion of additional questions in the second guide regarding the decision to end the venture and what supports or resources could have helped keep the venture going.

RESULTS

The following section describes ten key thematic findings that emerged from 4.0 alumni interviews and provides sample supporting quote from interviews.

FINDING 1: ALUMNI FOUND VALUE IN 4.0'S COMMITMENTS TO DEEP UNDERSTANDING, QUESTIONING OF ASSUMPTIONS, AND PUTTING COMMUNITY PERSPECTIVES FIRST AND FOREMOST WHEN EXAMINING PROBLEMS.

A fundamental component of the 4.0 process is the examination of assumptions and personal biases regarding proposed solutions and the communities that fellows aim to serve.

Alumni recognize the value of this commitment as they identify the goals of their initiative and move forward as a people-centered venture:

“Initially our assumption was housing is a great area to do more. And so we started working with 4.0 to really gain clarity about what it is that we're doing. I thought we went in having clarity and I thought that they were really going to help us with like the lift. Hey, this is what we're doing, and they are going to help us get there. But really what 4.0 did was they said, 'Okay. This is what you're doing, or this is what you think your solution is,' and they would always say, 'Break up with the solution and fall in love with the problem.' And so we would always go back, back, back, back. And we got to that point where it was like, 'Hey, I know that you really think that housing is the crux of this, but your goal is to help students be successful in college, to get students to and through community college. And it takes more than housing to do that.' And so we just started from a more basic level of like, what kind of infrastructure do we need to really get this moving. And 4.0, I think, was really instrumental in just helping us think about our goals and clarify what it is we're trying to do. And having that clarity gave us the ability to move forward, in really smart ways instead of just jumping into one solution.”

These questions of assumptions and pivoting applied at the venture level as well as the individual fellow level:

“Because 4.0's help looking at the foundation, the true purpose of the work, they helped me see that we shouldn't just jump forward to think about how to be a successful, robust, sustainable organization, and we should step back and say like, 'What are actually the true needs of this community that you're trying to serve and how you do that the right way?' And so that's taking us longer to figure that out, but I think it's a good thing to do it right instead of do it fast... Throughout that process, I also pictured myself running this organization. And so it was hard for me to envision a future for the organization that didn't include that, but I also realized like, hey, well, because of what the community actually needs, I also realized I don't really want to be the CEO. I don't want to be the person doing that work. I think I could do it but I just don't really want to... I haven't figured out why I don't really want to but I don't think that's really important. I think what's important is just that we took the time to figure out what the community needs and now we're taking the time to figure out who would be the best person to lead this organization and take my ego out of it.”

Similarly, another interviewee noted:

“... it's very centered on people. Who are the people you're trying to serve? What is the community served? What do they need? How are you figuring this out? Are you asking them? Are you just kind of coming to the table with your assumptions and not... Once we started talking about those assumptions, we start to see how tied into the identity work that is. I think

it was very smartly structured in that sense. If it's going to be people-centered, you've got to start with what you're coming to the table with as a person, and then you've got to focus and anchor the idea, ideating around people."

This finding is consistent with the alumni survey result that "identifying assumptions you might be making" was the most frequently reported 4.0 mindset/skill that alumni currently apply in their professional lives (55.8% reported "Always" or "Very Often" applying this mindset). Those with still active ventures had the significantly highest reporting of applying this mindset/skill (59.9%), followed by those with inactive ventures (57.1%), and then 4.0 alumni who participated before a venture idea was required (40.4%) (p -value = 0.003).

FINDING 2: ALUMNI HIGHLY VALUED 4.0 TRAINING APPROACHES THAT EMPHASIZED OPENNESS, QUALITY CONSTRUCTIVE FEEDBACK FROM PEERS, ACCESSIBILITY FOR VARIED BACKGROUNDS, AND A SUSTAINED SOCIAL ENTREPRENEUR MINDSET.

Alumni discussed how a major strength of the 4.0 process was gathering a community of peers to challenge one other in a constructive and supportive way. They described specific approaches they found valuable and unique to the 4.0 experience and how these helped develop their venture ideas:

"It doesn't even have to be a formal plan. They really just want you to start the idea, and then do the interviews. You submit the interviews, and then you get to [the workshop] with everybody else. Then that's when you're actually writing it out, and working... Everybody can take your idea, you do bites of your idea, little snippets, and people just can put, they put post-its about assumptions. Then you go home, you read through all the assumptions, you come back the next day, fine tune your value proposition, and it goes through another iteration of assumptions... It really is a thinking process that I think is really important, because before you spend a lot of time and money doing something that you think is great, you have a lot of feedback to really help you think about, 'Do I need to do this now? Should I maybe do something else? Or do I need to just fine tune and wait a little while?'... Somewhere, I still have the post-its they did, because they were really thoughtful questions. I think it's also important to have the input from people who are not necessarily in the same space, because if they can see value in your idea, then you really have a better chance of it working."

Alumni discussed the importance of openness to feedback cycles and how it fostered lasting personal and professional growth:

"What advice would I give to someone who was thinking about working with 4.0?... being as open minded as possible, to not being so attached to your idea when you go into it.... There's this phrase in the art world, 'kill your darlings' or something like that, where you can't be so

attached to your idea that you're not willing to let it morph and change, and let other people go through it and hash it out. I felt like there were just so many points where someone said something that I was like 'I don't want to hear that.' Like 'I don't want that to be true', but it was true... I think that going in with the idea that this is a learning journey for you as a person, and not going in thinking that 'Oh, I'm in this program because I'm here to execute a pilot.' It's like that's it, but that's barely it. It feels like it's the tip of the iceberg... Yeah, you're going to do a series of tests and whatever, but there's also all of this mass of learning that will shape you as a person and your work that if you're not open to that then you're missing the point of all that goes into it... I think just being open to, not being too attached to your ideas, and being open to changing not only your ideas but your core beliefs as a person, I think that would be my biggest advice."

The 4.0 approach breaks down big ideas into small, feasible steps, even for educators who have no background as entrepreneurs. This alumnus also described how the 4.0 culture encourages critique in a way that inspires confidence and helps to “build folks” rather than bring them down:

“[4.0] strengths are accessibility... having completely no knowledge around entrepreneurship or very skewed views of it, everything seemed so accessible. And what I mean by accessible, I mean they use language that we could understand. It was not a lot of jargon. They were very accepting. The critical minds, they used their critique to build folks, not to bring them down... [I]f anything, that created some sort of confidence around the project in and of itself. And it actually has inspired me personally to really start being more serious about my ideas and to take the proper steps to flesh out and get data... which I would never have done in any other context.”

Another alumnus described the shift in mindsets fostered by participation in 4.0 and how those mindsets continue to be applied as a problem-solving “roadmap” years later:

“Professionally I think... the biggest thing was [4.0] transitioned my mindset from an employee to an entrepreneur. That was really the first base where I really started to think about myself as an entrepreneur. I started several ventures since then. And it's just because I feel like, now, when I see a problem, I feel like I have a roadmap for how I can start to solve it through different business ideas. That really opened up just some mental doorways for me professionally in terms of how do I think about things from a business perspective instead of a program perspective. That's probably been their biggest influence on me professionally.”

FINDING 3: COACHING IS A CRITICAL PART OF THE 4.0 PROCESS, AND WHEN UTILIZED TO ITS FULL POTENTIAL, IT BECOMES A KEY ASSET FOR FELLOWS TO LAUNCH, ADJUST, AND MEANINGFULLY TRANSITION THEIR VENTURES.

Some ventures pivoted as part of the 4.0 process and coaching was critical to help fellows launch projects, adjust, and transition. Coaches are a key asset in helping each venture find its path and in supporting ventures to apply the mindset of approaching a problem in multiple ways:

“The venture started off really broad... We didn't end up doing what we planned to do, but we just ended up doing what we could do and created some lesson plans. We work with teacher professional development, so we ultimately ended up creating some activities that we [still] use in our workshops. It was very helpful, but it was not what we planned to do, which I think is par for the course... So we learned the meaning of the word pivot... we learned to pivot and we pivoted constantly... It probably wasn't accidental... I had a very good coach. That was very helpful, I think we had, it was either weekly or maybe it was every other week coaching. I found that valuable.”

However, there is a critical balance between supporting projects to pivot/pause and to keeping them accountable. The value of the coach-fellow relationship was highlighted by other alumni that described lost opportunities in the coach-fellow relationship. Alumni suggested that coaches should actively facilitate the process of pivoting and “pushing” or challenging fellows. For example:

“We had coaching. We had a coach who we really loved personally and could get a drink with, and all that, really, really great. The type of coaching that it was, though, if anything, it played into a lot of our insecurities. What I mean by that is, we saw a lot of failures. And they weren't really trying to keep that motivation, to keep pushing. It was positive, but it was kind of like, ‘Okay, that's just where it is. All right. We'll just leave it.’ And it seemed kind of complacent... I think a stronger, more rigorous coaching opportunity where, when meeting with our coach, there are a lot of expectations, more expectations or more deliverables, or anything like that, to kind of keep us going, and if anything, to inspire us to pivot or find new ways to really grow within that venture... The coach wasn't somebody who you meet with once. We met with our coach, for a while, monthly, then biweekly, and then weekly. And you really get to know that person, and you really care about them. And I think, not that this person wasn't a great person. I highly admired them. I just think I needed someone to be like, ‘Let's pick ourselves up. We got this. Let's take this idea and move it here.’ They don't have to give us the plan, the major plan, but maybe just give us a little push or nudge into that next step... [A]t the core of 4.0, I think they really cherish the autonomy of participants... And I don't think they want to set too much

structure around everything, because then that might scare someone off, or it may stop a really great idea from blossoming into something new... I understand that 100%, and I know that's probably a really hard line to toe by any means. I just think for us, being so green to everything, I think we really needed to build up the grit or that resilience."

The need for an expanded coaching role was echoed by another alumnus who ultimately never successfully launched their pilot:

"I would credit them [4.0] with getting me to walk away from what I would call a training or workshop thinking about what I may need to do more to launch [the venture]. So I think that was positive, but ultimately I think with those questions leaning out there and coinciding with a time in my life that was a bit tumultuous, it got left on the shelf... I think there was a follow-up call and maybe a coaching call a month or so later. I think perhaps having one or two additional touch points with 4.0 about my venture specifically, and perhaps helping me explore the tension in those questions that I raised and the reality of the space, etc., I wonder if it would have maintained a motivation for launch, because I came into the workshop or the fellowship Essentials geared up for, I think, a fall launch that year or whatever. I left feeling like I needed to do more work to launch. And so I think the gap between that and launch could have been just maybe one or two additional really substantive and robust touch points with them potentially would have kept me moving toward a launch, even if it was just a small pilot."

A fellow whose venture is still continuing discussed how highly effective and impactful their coach was in helping them transition their venture into a nonprofit organization. The match process of this fellow with a coach who had relevant firsthand experience was critical to achieving this success:

"And I think that was possibly the most beneficial experience, just working so closely with someone who had done that before and started their own nonprofit. And I think it was mainly through our conversations with [them] that we were like, 'Okay, we can do this. We should do this, start our own thing.'"

FINDING 4: THE MINDSETS, VALUES, AND TOOLS THAT FELLOWS LEARNED IN 4.0 REMAIN AN ACTIVE PART OF THEIR PERSONAL AND PROFESSIONAL SKILLSET EVEN WHEN A VENTURE TRANSITIONED OR CLOSED.

Several alumni described how major life events (moving, new jobs, going back to school, pregnancy, illness) affected ventures ending. There is little that 4.0 can or should do to intervene on those events. However, alumni continue to carry the 4.0 venture idea with them and to apply mindsets learned in 4.0 in their continued education, new jobs, and other aspects of their lives:

"[I]t was a crazy time for me anyways, because I was also starting a new job... I know I was moving and I was starting my PhD program also... There was a lot going on... Actually, it was so crazy that I didn't know if I was going to be able to hold it together... because I also have two kids... I was like, 'Oh, this will be a great way for me to start organizing my thoughts around this and trying to maybe more concretely figure out what this could look like.' And I'm not blaming the program or anything because it also could have very much been me with everything that I had going on... I don't know that in that moment I had the capacity in my brain to take on really putting all of the thought and energy into it that it needed... I felt like I failed and I just was never sure, even in terms of 4.0, I'm like, 'Have I now been blackballed because I didn't finish it, did I burn this bridge?' And not really ever knowing. I've continued to just have a lot going on. I mean, I'm still in school, I've been teaching full-time, I still have two kids. The one thing that I learned is making sure that I'm in the right place to be able to give it the time and attention that it would need...but it is something I think about a lot because it's still the direction that I want to go. I want to be coaching teachers and have an opportunity to push into schools and potentially have virtual professional development classes or whatever it may be, virtual and in person... I think about it all the time, but I still can't say I've gotten to a point where I feel like, 'Okay, I can make a go of this.' It's also scary as a single mom. How do I stop working to really put in the time and attention to do this? When do I make this happen?"

Another alumna shared that she still uses empathy interviews and clarity of purpose skills that she fine-tuned during her 4.0 involvement, even though her original venture ended in 2019:

"I think one is the empathy interview skills. It wasn't a new concept, but I think having it reaffirmed and have the space to practice it was really helpful and something I still use. That's the one that stands out the most. But also I would say actually getting really clear about what you do and don't do has been really helpful as well. I remember that being kind of a through line throughout the series too. And saying no to things that aren't in alignment, like not stretching yourself too far outside of your venture. That was really helpful."

Other interviewees shared additional ways that they continue to use resources and content from their 4.0 experience in their present context:

"I have referred multiple times to their handout worksheet that was how to scale from pop up all the way to larger venture. And I have continued to use that in my work in philanthropy, helping people who apply to us start tiny and move into something bigger and really think about their program. But I pull in other tools from other places too."

Another person explained:

"...having stakeholders have a voice, having the people in the community help build the idea with us is something that I've done. I think prior to going there [to 4.0], it was just me and I

really didn't even know how to approach people on the venture outside of like, 'Hey, we got a school coming. You want to enroll your student?' But not really knowing like, 'Hey, we have a school coming. What would you like it to look like?'... It changed my thinking... it is the content and the self-exploration and then the equity piece because... I can use that in my everyday life, my professional life, and entrepreneurial ventures that are outside of the education field. Engaging your community, engaging stakeholders, what questions to ask, all of those things came from 4.0 and it's something that I can use forever as a professional and in my personal life."

Other alumni mentioned 4.0 improv as something they remembered. For example:

"One of the sessions we had was improv. That was powerful for me, just as an experience, it was something I had not done ever before. I actually ended up taking an improv class, maybe a summer or two ago, just because I remembered that experience and how I enjoyed it. But it also, I think for me, crystallized the importance of the... 'Yes and', the building off of, the always looking to see how you can build, connect, extend."

Another alumna talked about the role of 4.0 alumni communications and resources, and how it is useful knowing those supports exist even when ventures do not develop or continue:

"Oh so what I really, really like is that there's an alumni community, they keep the engagement going. They send out, I don't know how often it is, maybe monthly. There's a portal that alums can log into for resources and there's I think like a monthly, maybe it's monthly, email blast where they list a whole host of not just updates on other alum and where they are and other, like how their venture is growing and expanding, but also resources around funding, seed funding, also job openings, also just general news. So even for someone like me who never got their venture off the ground and whenever I do return to it, I have a host of resources that I can use."

FINDING 5: MANY ALUMNI WITH PAUSED, TRANSITIONED, OR ENDED VENTURES REACH A CROSSROADS MOMENT WHERE THEY WOULD BENEFIT FROM ADDITIONAL SUPPORT FROM 4.0.

Due to a variety of factors, many alumni have been faced with the decision to pause, transition, continue, or end their venture. These crossroads moments are a crucial, and many times difficult, period for 4.0 fellows. Several interviewees shared that they would benefit from assistance navigating these decisions. Here an alumna describes how the venture idea has slowed yet stayed with them and what questions they are exploring about how to continue being impactful with their efforts. This experience evokes the essence of being at a "pivot point," asking questions, and otherwise examining one's own role:

“Now I’m a full time student, so I’m not doing any of the work explicitly... I have a website, I put posts up every week. But in terms of a full-fledged venture, it’s never become a full baked venture that really clearly defined a problem statement, really clearly defined a solution, that has been tested, piloted, scaled. It hasn’t gone through the full evolution of that. I’m almost... kind of still at the starting blocks, around really trying to figure out and refine what it can be... [I’m] figuring out, does it need to be, or are my experiences, my passion, my skill set, better served and more impactful if I just work with an existing organization that is also deeply invested in doing work around young black men?... There’s lots of organizations doing collective impact work, doing community-based work. It could be its own thing, I could also be very happy just working with an existing organization that’s invested in a similar group as I am.”

An alumnus suggested that 4.0 could create openings or opportunities following major personal or professional transitions in order to counsel alumni through pausing an idea, or pivoting, rather than stopping the venture. There is a lack of closure for alumni whose ventures have not continued because no one coached them away from the venture, no one did a “closeout interview:”

“At the end of the fellowship, we had our graduation. And a lot of it was focused on what are the next steps for your venture, how do you continue leveling up, and how do you expand. It was a lot of skill building for what’s coming next... I wish that there had been an option for me, when I went back for my graduation, to really process and decide, just have somebody to be a sounding board about the idea of closing down an idea. What I liked about 4.0 is I felt like that was always on the table. It was never like everybody is going to succeed and everyone’s idea is going to become a million dollar business. It was always like failure is common, failure is to be expected. It is okay. That was really great. But I felt like I could have used someone... It would have been really great if there was a way to decide, and not just me in my head feeling the lack of confidence, me just deciding on my own. And again... I had all these life things going on, so it’s possible that nothing could have changed my mind, but it would have been nice to have been walked through it in a more objective way. How do you decide if it’s the right time to close it down, or how do you adapt your idea to a new location?... For me I was just like there was enough things going on in my life that I was like I’m not going to pick it back up again. But I think that it’s possible that I could have pivoted, I could have truly paused [instead of stopped]... I think that’s what would have been helpful, is maybe some workshop or someone to walk me through in a more objective way, are you sure you’re ready to give up on it entirely, or do you want to pivot it to just being for elementary [schools], do you want to pivot it, what would it look like to close down something in one community and restart it in another community? How would you even know that is necessary in the new community?”

Suggestions from alumni interviews echo this idea that the roles of 4.0 coaches could be expanded to: include advising fellows through a pivoting process, make decision-making more intentional, and provide closure if they ultimately decide to end or pause their ventures:

“The other thing is you could think about maybe a coach or somebody who has ended their venture, who could help maybe talk a person through that who was... in that crossroads.”

Another interviewee described how coaching could be a “thought partnership” to help bring clarity to venture goals and their future course:

“I think for me personally, I probably needed, and still need, which is why I’m still grappling, or would benefit from, I need probably just almost, I guess masterminding, where it’s a group of four of us, it’s a group of six of us, somebody [who’s] a more expert or coach, who’s taking this group of six through the process over a year. Whether it’s meeting once a month or whatever it is, but it’s much more high touch and much more thought partnership, to get to the clarity of what it is you’re trying to do.”

FINDING 6: IN HINDSIGHT, SOME FELLOWS FELT THAT 4.0’S MODEL IS BETTER SUITED FOR FURTHER DEVELOPED IDEAS AND PEOPLE.

The theme of needing a more developed idea in order to enter 4.0 and successfully launch a venture was echoed by several alumni. Fellows saw 4.0 programs as being very open while applying; once enrolled, they felt their venture ideas needed to be further developed to meet expectations and timelines:

“I would say to someone to really take a good amount of time, six months to a year, to really ground themselves in their venture before they really create or apply for a 4.0 wave, just because I think that coming in and having just even a little more strength within your venture can actually set you up for a lot more success. Now, I’m not saying success meaning growing exponentially, and have all the cash flow or anything like that, but pulling away and feeling like, oh wow, I was really successful with this based off my own indicators of success... What I’m saying is, spending more time on your idea and really sussing out those different aspects of your venture before applying... just really know who your user or potential user would be, where those cash flows would be, really know who you’re serving, who you want to really serve. And I’m not saying we didn’t know who we wanted to serve, I just think we were shaky on that and never really fleshed that out enough to feel strong in our venture afterwards. Because then we were like, ‘Oh, okay, now we have to pivot completely, and it’s a totally different idea.’ ”

Another person described feeling like their idea was “fuzzy” while other 4.0 fellow were progressing more quickly:

“Because I think, in all these things that I've been in, it just hasn't become clear. It's still been super fuzzy, even when it comes down to the test where you're testing the problem solution statement, so I feel like, I think the model maybe works for people who are a little bit clearer, or just a little bit more, they're developing the muscle around this way of thinking and doing things faster.”

Another alumnus described readiness for 4.0 in terms of a 1 to 10 self-assessment scale:

“I would say my biggest piece of advice is I think you need to have a pretty strong conceptual idea of your project or what you're wanting to do... When I read, it seemed like if you just have this idea, but you're not really exactly sure what it's going to look like then Essentials will help you with that. But I think I needed a little bit more of an idea or more conceptualized than I had. I don't know how to frame that in advice. I don't know on a scale of one to ten, if ten is a fully developed idea, you should probably be at least a five.

[Interviewer]: Where would you say you were, on your same scale, if your advice is 'be at a five'? [Alumnus]: I was probably a two.”

FINDING 7: SEVERAL FACTORS CONTRIBUTED TO LIMITED VENTURE OUTCOMES, INCLUDING FUNDING CUTS, LACK OF TECHNICAL EXPERTISE, AND LIFE CIRCUMSTANCES.

A few alumni discussed the major setback when 4.0 cut their grant funding in half during one fellowship wave. This affected the trajectory of those ventures and it undermined confidence in 4.0 as an organization. It also raised the question of how truly open feedback and communication channels are between fellow and 4.0 staff and facilitators.

“Well one thing they did is we applied for a grant that was supposed to be \$10,000 and they cut it to \$5,000. I would advise them not to do that again. After someone's been awarded a grant, that's not the time to cut it. Bad, bad move. It created a lot of bad feeling. The interesting thing was no one ever said anything about it publicly... people were talking about it but not to the people at 4.0... It was sort of like in public everybody was gung-ho, 'This is great, this is so amazing. Thank you so much, this is wonderful.' I wondered about that, why wasn't it safe to say?... For me a deal is a deal. I resented it. I resented the work after that because it was like I was still going to do as much work but only for half of the reward that I had really applied for and agreed to. At the same time, I am grateful because I did benefit greatly. It was a wonderful process, but it was more difficult because of that.”

Another alumnus discussed the negative consequences of the budget cut and the difference the initial \$10,000 in grant funding could have made in their venture and making the work feel substantial:

"I don't know that this is a recommendation for how to improve, but it was certainly something I hope they've worked out... They told us we were going to receive \$10,000, and then all of our funding got cut in half and we got \$5,000. That was terrible. That was really, really bad. I'm sure they felt terrible on their end too. And I imagine having to do that once they figured out how to make sure that never happens again... That was just a bad feeling to have your funding cut in half... I had budgeted out how I would spend the money, and now I can't remember exactly what I cut... \$10,000 is a nice amount of money to feel like what you're doing is a really legitimate operation... And I think having the difference of five grand is huge ... I don't exactly remember how I was planning to spend all that, but I likely would have been able to hire some more people to do some contract work that maybe would have impacted the end... It made me... .. I was so confident, and I felt like they were such a top notch organization, and then when that happened I was like 'Oh, who are these people?' I was like 'Oh, I thought that you guys were super legit', and I still, I do still think they're very legit. But that made me have... I had a little bit of wavering confidence on who they were that they did not have it together enough to anticipate this... If you made a promise, keep that promise and whether that means you need to not exactly run the program next year, then that's on you, but you promised me 10 grand. I did not get 10 grand."

In addition to funding support, several alumni discussed ventures that involved building apps and websites for which they had content knowledge but lacked technical knowledge. Fellows pivoted away from some of those initial ideas that required these high tech levels. They discussed the idea of partnerships that 4.0 could help build to expand options for technical build-out of ventures:

"It never took off in the sense that I feel like I was trying to run two different things at the same time, like there was a coaching/advocacy piece and there was also this app piece that would work with the coaching. I imagined that the app would have been pretty successful because there's nothing like it on the market. But I don't have a tech background, and so if I had a tech partner I think it would've worked a lot better..."

Another alumnus discussed challenges of pivoting from a relatively new, part-time venture to one that could no longer be balanced with maintaining a teaching job. Despite supports that were available, they did not have readiness to immerse completely into the venture:

"A couple of things happened. I was doing all this work on [the venture], while also teaching. It's this kind of sad, ironic story of working on teacher burnout and getting really burned out. That was just a very real experience for me of just being like, 'I'm feeling pretty tapped and exhausted.' And I got an opportunity to go do some work for the district and I wasn't able to continue to contract with these schools in a district role if I took that position. And so it was

just the right position came along at the right time for me to be like, 'All right, I'm going to step back. I'm going to do only one job for a while and see where that puts me and get a little bit of balance back in my own life'... I mean, I think that there are a ton of supports out there and it's about leveraging those resources and those support systems. And I think there's also just a ton of really big decisions and stress around starting a company, right? I think that the more programs that you're in and the more resources you have, at least for me, there was an additional layer of stress of, 'Okay, if I continue to dive deeper and deeper into this, I'm going to eventually have to make a decision to do this full time.' I wasn't really at a point to give up some of the security that I gained in the other side of my professional career to dive into [the venture] 100%. I mean, I don't know. I don't know if there's anything that would have really changed my mind about that or made me feel like that was manageable. I got great local and national support for [the venture]. I think it was more me than it was the support system and the resources."

FINDING 8: MANY ALUMNI HAVE A STRONG INTEREST IN STAYING INVOLVED AND UP-TO-DATE WITH 4.0, AND SO RECOMMEND CONTINUAL EMPHASIS AND GROWTH IN THIS AREA.

Numerous alumni discussed receiving the 4.0 alumni newsletter¹ and wanting to stay connected and involved with the organization. They were aware of opportunities with the organization, such as contracts and coaching, and some even have pivoted to those roles. Interviewees recommended continuing to develop both the alumni network and alumni skills because 4.0 has *"a really rich wealth of folks to tap into."* Several alumni expressed their positive and uplifting associations with the organization and indicated they would like to *"give back"* to 4.0 as well as to the social entrepreneurship community:

"I think another push for development that 4.0 helped me with was considering the fact that you can go out there and make a difference or make changes on your own or in a small group. I feel like the joy factor and the happiness working with 4.0 and the positivity and the connection with the community really helped keep me going at times... And I've also now been fortunate to work the past year as a coach for the 4.0 Tiny Fellowship to just stay connected with 4.0 and pay it back a little bit and work with new Tiny Fellows. So that was really exciting and helped, that was another opportunity for 4.0 to build my own skills coaching other entrepreneurs. So I think 4.0 also does that as a great opportunity continuing to develop the skills of their alums and seeking ways to do that."

¹ Note: The alumni newsletter was used to communicate information about the alumni survey. Interviewees were then randomly selected from the sample who completed that survey. This sample represents alumni who read the newsletter.

Alumni also mentioned looking forward to receiving communications that highlight ventures launched by 4.0 fellows. They expressed consistently positive feelings, and even happiness, about receiving 4.0 updates:

“The only reason I kept on opening those emails from 4.0 is because every touchpoint I had with the organization, from the first one to the last one, was a positive experience that was thoughtful and brought a lot of, actually, joy to something that could be very intimidating as a process and very encouraging as well. I look forward to learning more about what 4.0 has done for the past five years, and what organizations have come out of there and really helped people. I think some success stories would be heartening.”

FINDING 9: ALUMNI FREQUENTLY EXPRESSED INTEREST IN MORE SUSTAINED TOUCHPOINTS FOLLOWING THEIR 4.0 FELLOWSHIP EXPERIENCE.

Alumni mentioned the idea of 4.0 offering opportunities to further engage those who participated in Essentials or Tiny, pivoted away from their original venture idea, did not launch their ventures, or ended their ventures, and who want to pivot back to with renewed energy to revive or reinvigorate them. Alumni were asked what 4.0 could do to improve, and alumni “reunions” or conferences were mentioned as networking opportunities as well as for working meetings. When asked what advice they have for 4.0, one person responded:

“Maybe more direct follow-up I guess. Because the support is there, right, but if you're not a person like me who's extroverted and just like, ‘Oh, there's a resource I'm going after it’, if you're not that kind of person you might fade away and miss some of the opportunities. I can't really think of direct contacts that I've had necessarily, like, ‘Hey, here's your 2017 cohort. Here's what they're doing now. You guys should come back.’ I think something like that, maybe just returning to, to see where people are now, how did their venture go?, how did it help?, what can we do? I don't feel like that happens directly, and maybe that's a point for improvement... I haven't talked to the people from my cohort. I don't think we've had a reunion from the cohort... [I]t hasn't been this specific focus on, let's see where you are, let's specifically see what you need and move you forward. It's general.”

One individual described how an alumni conference would build the greater 4.0 community, and would deepen impacts beyond social gatherings in regions or cities with a large 4.0 presence:

“If they had a conference or if they had funding, especially funding to get alumni out who are still engaged or still active on some level. The more they can just get people together, I think the more connections and the stronger their community is going to be... It would almost be easier for me to just hop on a plane and go somewhere because I know for the time that I'm putting in I would get a lot out of it, [rather] than going over to a happy hour event where I

feel like, that might be kind of hit or miss. I know if 4.0 is putting thought into the programming that it's going to be good. But a happy hour, it's like, I'm not sure."

Another interviewee echoed this thought with a suggestion to have a mini conference where 4.0 alumni can come back to for strategic planning or a reset period:

"I think that would be something interesting for them to approach because with the mini conference, one, it can be a revenue generator but two, it allows people to come back into the mix...and...you can get updates as far as where we are as far as personal ventures...Or for example, conversations like this or interviews like this could help people just reset where they're at and help them plan. Perfect example I guess, is strategic planning for the year...I'd definitely sign up for something like that, where it's people that have similar experiences coming back again for some learning or for some reset period for the year."

However, whether it pertains to potential alumni reunions, or weekend workshops that Essentials fellows attend when developing their venture ideas, sustained follow-up is necessary. One alumnus pointed out that concerted and sustained work is needed following these gatherings in order to ensure progress:

"Conferences are great moments of inspiration, but they require follow-up for action and learning to actually take place. So, it's the sustained... that's the keyword we keep on throwing around in my organization. Sustained follow-up... You were in this at the conference, now let's talk about how you're going to apply that over the next two weeks, four months, four years. And that requires a lot of follow-up coaching and support and community, or professional learning communities... cohort-based professional learning communities that meet often and continue from their Essentials experience."

FINDING 10: THERE ARE OPPORTUNITIES FOR 4.0 TO OFFER GUIDANCE AND ALTERNATIVE PATHWAYS FOR FELLOWS AND ALUMNI THAT REACH PIVOT POINTS.

Fellows who arrive at 4.0 with more developed venture ideas are poised to more fully take advantage of various resources and supports that 4.0 provides. Fellows who don't seek or ask for what they need (whether because they are unaware of supports available or because they lack confidence) are at a disadvantage. Specifically, opportunities exist for 4.0 to offer supports for fellows along the entire continuum of venture stages, and especially more pro-actively at earlier stages and at pivot points (e.g., fellows at earlier stages of idea/venture development who didn't finish and want to revive their venture ideas; fellows who need to pause their ventures; fellows who are struggling and need adaptive methods or specialized coaching).

Some fellows knew they were not progressing along the 4.0 process, and suggested mechanisms to acknowledge this and to explore alternative pathways for projects at different stages:

"I think I felt ashamed because I didn't finish. And so, I was like, 'I don't know that I deserve to keep in touch with anybody'... Toward the end, as they were talking about doing the pop-ups and stuff like that and piloting, I knew I wasn't ready to do it. I knew I wasn't ready to pilot anything. And I think at that point I really started to feel disconnected from everything. And I could see how excited people were and I think for me as the realization came over me that I was not even close to being ready to do any of that. I think it just made me feel more disconnected from everything... I guess from my perception, it didn't seem like there was really an opening for people who were still feeling like they weren't there... I think it would have been nice to connect with the facilitators or at least a facilitator. I think that with the facilitators, we were in a group, in our large group, for pretty much the whole time. So I never felt connected to a facilitator. And I wonder if that would have helped me to express some of the disconnect that I was having, but I never really felt connected to a facilitator, not during and not after... So I'm wondering if opportunities, even in small groups or whatever, for people to really connect with a facilitator, to build that relationship, to help people know who is my point person if I'm having a hard time, if I'm just feeling stuck because I mean, this is a hard process and surely I can't be the only person who's ever felt stuck or who's ever felt like this isn't coming together for me the way that I was hoping it would... I get that they're trying to get these cohorts through so that they can give people lots of opportunities or whatever, but I mean, the reality is, is everybody going to be able to do this on their timeline? And if that's the expectation, then that just has to be really clear on the front end. But again, then I think that also points to, you need to have enough of a developed idea that you can be on that timeline."

This same alumnus also described struggling with design thinking methodology:

"I struggled with the design thinking aspect. It was a process that didn't, it wasn't as helpful as I wanted it to be in making things more concrete for me. I felt like I ended up at least as confused as when I started, and feeling like I wasn't even sure if what I wanted to do was valid... I know that's not the only way, it's not the only approach, and so I wonder if there was maybe a separate program that had a different approach than design thinking... I think I ended up just as confused as when I got there... The group sessions are fine, but I think for the people who maybe are really struggling to conceptualize their idea, those people are likely going to need a little bit more guidance, maybe a one-to-two kind of thing or a one-on-one kind of a thing [could work]. And then what do you do with somebody who is having a hard time with the design thinking where that's not getting them closer to where they need to be or where they want to be? How do you know as 4.0 on that end, how are you checking in to find out where is the struggle, where is this roadblock? And if it is the design thinking, are there

other avenues, are there other ways of helping people to make things more concrete or to conceptualize their idea better, to create something out of it?...

Another alumnus discussed how 4.0 enables various pathways and pivots along the fellowship process. This alumnus did not take advantage of coaching, and retrospectively sees the value in it. When asked what advice they have for others considering 4.0 they recommended taking advantage of resources 4.0 provides, and being open to various outcomes and pivots with their venture ideas:

"Take full advantage of everything that is offered to you. Start to make connections with individuals early. The mentoring and coaching relationship that 4.0 does offer, but I didn't take advantage of, probably would be a game-changer. And also understand that just because you have an idea of an ideal pathway to success, does not mean that there is only one pathway to making sure that whatever problem you're trying to solve can get solved. There's the very cynical 'Shark Tank' approach of like, just time to put the dog down [end it] if no one's doing anything with it, and you're investing too much of your own time and money, and it just doesn't seem to be going anywhere. So, that's one possibility. Another possibility is partnering with other individuals who are like-minded in solving that or trying to get that goal done within a larger organization that you do not run, whatsoever, which is totally fine."

Even if a venture never fully launched, the 4.0 experience opened up other problem-solving mindsets and pathways for alumni:

"Personally it helped me to always be thinking about the problems that I see in education and potential solutions and make sure that I can have some sort of actual tangible outcome. Also it helped me to be comfortable and confident, like bouncing ideas off of everyone, but also selective... Because it helped me to also stay grounded in who I'm trying to reach and what I'm trying to do and for whom... it helped me to really hone in on my education community."

A few alumni expressed doubts about belonging in the 4.0 alumni network because ventures did not develop. This highlights 4.0's inclusive alumni community, and the opportunity to offer continuing opportunities for alumni engagement through "refresher" workshops or alumni conferences:

"Anytime I receive emails or surveys or just information from them, I actually feel like a bad alumni, because one of the things that I was thinking about is I don't think I put in enough work to be counted as part of this larger alumni circle."

RECOMMENDATIONS

RECOMMENDATION #1: IMPLEMENT FELLOW/VENTURE SELF-ASSESSMENT QUESTION(S)

4.0 alumni come from diverse backgrounds and stages in the venture development process. A concrete way to map out an entry point for each person for the 4.0 application to include a self-assessment question of how far along the applicant is in developing their idea on a scale of 1 to 10:

- 1=it's just an idea I haven't told many others about it
- 5=I have been committed to this idea for six-12 months; I have done background research and sketched out how it might work and who I want to reach
- 10=I have a venture plan and an audience I want to reach; I've networked with people/organizations doing similar work; I've engaged with community members about the idea and have connections with potential collaborators; I am ready to explore details for a test run.

This self-assessment scale can be repeated at various points in each 4.0 fellow's process (e.g., quarterly) to help fellows self-reflect on progress and stay accountable, and to help 4.0 better gauge stages of each fellow/venture in order to best support them. To complement this self-assessment of how developed the venture idea is, 4.0 could include questions on level of confidence in launching the venture (over a specified time frame), and prior knowledge about the process of launching a venture. Responses to these questions could collectively be utilized by 4.0 to better gauge what supports could be needed (e.g., figuring out what you need, asking for what you need, and getting guidance and support for those needs). Responses to these questions could also inform how workshop groups are formed.

RECOMMENDATION #2: ARRANGE SMALLER FELLOW GROUPS

4.0 workshops could be designed so that fellows work in smaller groups. Several alumni talked about how smaller groups were needed so alumni with less developed venture ideas, or those who needed more support applying the design thinking process, are not overshadowed and intimidated by ventures that are further along. This approach allows for more time both to process a high quantity of new knowledge and learning and connect with others and explore ideas together. The self-assessment scale recommended above could be one factor used to inform small group formation. Another factor could be grouping loosely based on venture type (e.g., technology based projects such as web or app development; workforce development; teacher-focused wellness and development; student and family-focused initiatives).

RECOMMENDATION #3: COACH ON PIVOTING

Specific training topics for coaches could address pivoting. Further, recruited coaches could include those whose ventures pivoted, stalled, or did not continue. When a venture stalls, pauses, or closes down (whether for personal or venture-specific reasons), more intentionality and strategic decision making are needed at these stages. Pivoting leads to changes in the course of action, and is applied in the face of potential or actual failure. 4.0 mindsets/skills emphasized with fellows throughout the 4.0 experience include pivoting-related concepts such as breaking down a problem, testing ideas in multiple ways, failing and learning from the experience, and trying again after failing. Alumni discussed that 4.0 workshops emphasize the importance of accepting and even embracing failure and learning from that process. However, more intentional coaching is needed to move these mindsets/skills into practice.

Findings from the 4.0 alumni survey further support this report's qualitative data on pivoting. Alumni whose ventures have continued are statistically more likely to report always or very often applying pivot-related mindsets: identifying assumptions you might be making; sharing an idea with people who have not heard about it before; breaking down a problem and testing it in multiple ways; understanding how tiny tests apply to the bigger picture; and, trying again after failing. This means ventures which have continued are associated with pivot-related practices. If 4.0 can cultivate more of these mindsets/skills among ventures that are at critical junctures of facing potential or actual failure, the organization could increase the likelihood of more ventures continuing.

In addition to coaching on pivoting within the traditional Essentials and Tiny fellowships, 4.0 could consider developing a workshop and coaching fellow program specifically intended for ventures that need to and are prepared to pivot. Such a program would be on the cutting edge of applying findings from the pivoting literature to social entrepreneurship.

RECOMMENDATION #4: DEVELOP TECHNOLOGY PARTNERSHIPS

Alumni interviews showed that 4.0 has a wealth of resources, connections, and funder networks that support ventures that advance to full launch mode. 4.0 could facilitate similar relationships with big-tech companies to provide in-kind or collaborative technical support and expertise in order to facilitate technical development of web- and app-based ventures. Multiple interviews from a random sample of alumni ventures showed that fellows have expansive content knowledge and ideas that are grounded in needs among the education and social sectors. However, the lack of technical expertise is a barrier to getting those much-needed and innovative ventures off the ground.

RECOMMENDATION #5: STRENGTHEN ALUMNI COMMUNITY

The more opportunities to follow up and gather, the stronger the 4.0 alumni community and network will be. Several interviews identified the need for more direct, sustained follow up from 4.0, after workshops to facilitate action and learning, and to more intentionally facilitate cohort-based professional learning communities that continue to learn from and push each other following their Essentials experience. While interviews were more likely to be selected from a sample that actively reads 4.0 emails and newsletters, there was substantial feedback about the enjoyment of these positive touchpoints that 4.0 currently uses to engage alumni. To further strengthen and expand alumni networking, 4.0 can consider including alumni spotlights/venture case studies in the newsletter. Spotlights can include those not continuing their specific 4.0 venture ideas but who are still living out ideals that were shaped by 4.0 mindsets, skills, and experiences along the way. Finally, 4.0 can consider hosting an Alumni Reunion for networking purposes; this could also to provide opportunities for alumni to revive and work on their venture ideas. 4.0 could include an emphasis on ventures that are pivoting or paused and that want to seize their ideas again and turn them into concrete actions. These actions will help 4.0 create alumni engagement both outside the initial fellow cohort and across venture types in order to build maximum benefit for individual alumni and collective impact for the 4.0 organization.

CONCLUSIONS

Feedback from alumni in surveys and one-on-one interviews showed that 4.0 alumni have continued affinity for 4.0 mindsets/skills years after participating in fellowships. Fellows whose ventures are still continuing show the highest levels of applying 4.0 mindsets/skills in their professional lives, with the exception of understanding and using design thinking. It is likely that design thinking was emphasized prior to 2017 before fellows were required to have a venture idea. Multiple 4.0 mindsets/skills align with pivoting, a concept increasingly applied in the field of social entrepreneurship (Crilly, 2018; Flechas Chaparro and de Vasconcelos Gomes, 2021).

Interviews with alumni exemplified pivoting-related 4.0 mindsets/skills of identifying assumptions; sharing an idea with people; breaking down a problem and testing it multiple ways; and, trying again after failing. Interviews revealed 4.0's emphasis on engagement and connection to community. Alumni elevated strengths and lessons learned from their 4.0 experiences and made specific suggestions of touchpoints and crossroads where 4.0 itself can pivot as an organization. Interviews revealed opportunities to enrich fellow experiences, especially those who did not fully launch or sustain their 4.0 ventures, by more carefully fine-tuning the coach-fellow process and by engaging coaches to specifically guide ventures that pivot, pause or stop in order to bring intentionality and closure to those processes.

The 4.0 experience can follow multiple pathways. Some ventures will launch, grow, and follow a straight-ahead path. Other ventures will stall or pause. Some fellows may have realizations that they can work on social issues of importance by joining with existing like-minded organizations. Even when ventures are not sustained over the long-term, alumni continue to carry 4.0 mindsets/skills into their personal and professional lives.

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