Thrive Principles:

Positive Instruction for Growing Learners

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Editor's Foreword

Preconditions

Content.

- All kinds of content.

Learners.

- All learners.

Learning environments.

- A higher education environment that is focused on mastery of discipline-dependent competencies in the context of positive instruction.
- A curriculum that builds flexibility into learning experiences.
- A positive education philosophy, focusing on well-being as a skillset to be developed.

Instructional development constraints.

- Instructors and faculty advisors act as mentors (requires more time with individual learners).
- Adoption of mastery-based (competency-based) assessment rather than performance assessments.
- If they do not exist, time must be allotted for development of competency statements and detailed rubrics.

- Flexibility is needed to allow for students to move through competencies at their own pace, receive corrective feedback and coaching.

Values

About ends.

- Development of, or exercise of, well-being by a fostering growth mindset and grit is highly valued (Thrive Principles).
- Transfer of Thrive Principles into real world/other areas of life is highly valued.
- View of learning as process-oriented is highly valued.
- Preparing the learner for their chosen career is highly valued.

About means.

- Learner's superordinate goal as the motivating factor for both learner and instructor is highly valued.
- Working within Vygotky's Zone of Proximal Development (ZPD) is highly valued.
- Pre-assessment and frequent formative evaluations are highly valued.
- Deliberate practice with formative feedback is highly valued.
- Cognitive apprenticeship by peers and instructors is highly valued.
- Teaching and modeling of growth mindset and grit principles is highly valued.
- Peer coaching and teamwork experiences are highly valued.

About priorities.

- Effectiveness is valued over efficiency.

- Mastery goals are valued over performance goals.
- Thrive Principles prescribes the mastery of competencies within discipline-dependent content along with the demonstration of growth mindset and grit; mastery learning and positive behaviors are equally important.

About power.

- Guidance by mentors should fade over time.
- Learners new to the Thrive Principles and/or mastery learning or those who struggle with self-efficacy and self-regulation will require more assistance.
- Learners with a growth mindset and a well-developed sense of grit will have more autonomy in terms of directing their own learning.

Universal Principles

Thrive Principles arise from four domains of research and practice:

Positive Psychology.

- What "works" can be the basis for program improvement.
- Well-being (positivity, particularly growth mindset and grit) can be grown.
- Positivity (positive mood) can increase attention, creativity, and holistic thinking.

Growth Mindset.

- Growth mindset values effort, improvement, and development.
- A growth mindset is mastery-oriented.
- A growth mindset can be developed/adopted, even if it was once fixed.

- Growth mindset can be taught directly.
- Growth mindset can be developed through application and experience.

Grit.

- Grit is passion and perseverance in the face of difficulties.
- Pursuit of superordinate goal(s) is a necessary aspect of grit.
- Deliberate practice is a foundational habit of grit, which fosters learning.
- Grit, like other character traits, can be nurtured in the learning environment.

Mastery Learning.

- Mastery learning supports growth mindset and grit.
- Mastery goals are articulated through clear, hierarchical competency statements.
- Detailed rubrics are necessary for goal setting and assessment.
- Students falling short of mastery will receive coaching and retake the assessment until mastery of competency is demonstrated.
- Tracking learner progress and difficulty, is critical to mentoring efforts.
- Learners must be allowed to progress at their own pace.

Situational Principles

- Administer an "I" when learners fail to demonstrate mastery in competencies, until they can show necessary improvement.
- Give corrective feedback, encouragement and coaching in content and encourage maintenance/development of growth mindset and grit when learners fail to

demonstrate mastery on an assessment or if formative feedback shows they are struggling.

- Allow learners who achieve mastery of competencies quickly to progress to the next level, including to the next course.
- Give more autonomy to learners who demonstrate mastery, along with positive behaviors such as growth mindset and grit.
- Encourage students to complete "capstone" projects or develop portfolios (depending upon the course of study) to complement their competency attainments.

Implementation Issues

- Where mastery learning has not been adopted and/or flexibility is lacking, instructors can encourage growth mindset and grit (positive principles that contribute to well-being), but the intervention will not be as effective.
- When students lack the desire to use or develop positive character traits, such as growth mindset and grit, Thrive Principles will be compromised.
- Faculty who lack the desire to use or develop positive character traits, such as growth mindset and grit are unsuitable for the Thrive Principles learning environment.
- For institutions that are not mastery-learning oriented (or competency-based), development of competencies and detailed rubrics for assessment may be costly and time-consuming.

- When the student to faculty ratio is high, coaching, mentoring, formative assessments and feedback, and tracking of student progress—critical supports for Thrive Principles— may be compromised.
- For students who struggle to adapt to mastery learning or fail to demonstrate competence on a regular basis, the extended time to complete coursework may create financial aid issues and delay completion of degree.

The Basis for Thrive Principles

Introduction

Education has been traditionally concerned with academic success, and volumes of research have shown that academic success, borne out of cognitive skills, is predictive of economic success, on both the individual and the global, societal level (Balart, Oosterveen, & Webbink, 2018, P. 134; Garcia, 2014, p. 3; Bolli & Hof, 2018, p. 46; Laursen, 2015, p. 19). However, more recent studies have identified another skill set, which is central to academic and economic success: non-cognitive skills. Non-cognitive skills are revealed through behaviors like critical thinking, collaboration, problem-solving, emotional health, work ethic, grit, perseverance, and self-control, creativity, and communication skills (Laursen, 2015, p. 20; Garcia, 2014, p. 7). The Economic Policy Institute defines non-cognitive skills as representing the "patterns of thought, feelings and behavior of individuals that may continue to develop throughout their lives" [and these skills play a pivotal role in the education process] (Garcia, 2014, p. 3; Balart, et al., 2018, p. 136). Educators and policy-makers are beginning to examine, with the hopes of improving, non-cognitive skills because, "Non-cognitive skills might be an important omitted variable in the relationship between cognitive skills and the economic

outcomes of nations" (Balart, Oosterveen, & Webbink, 2018, p. 134; Garcia, 2014, p. 3; Laursen, 2015, p. 19). With researchers are calling for policy change that will to encourage learners to thrive, new methods of instructional intervention are warranted, and the Thrive Principles discussed in this paper can meet this need.

"Positive Psychology is the scientific study of optimal human functioning. It aims to discover and promote the factors that allow individuals and communities to thrive" (Akumal Manifesto, 2000). In *A Primer in Positive Psychology*, Peterson explains, "Positive psychology is the scientific study of what goes right in life, from birth to death, and at all stops in between…it takes seriously as a subject matter those things that make life worth living" (2006, p. 4). When applied to an organization or system, positive psychology is focused on finding and promoting what works well, rather than focusing on finding problems. Thrive Principles is concerned with instructional practices that echo the sentiments of positive psychology, including nurturing well-being in the learner by fostering growth mindset and grit (White 2016, n.p.; Layng, 2016, p. 48; Seligman et al., 2009, p. 295). Well-being is a subjective state with "relatively high levels of positive affect, relatively low negative affect, and the overall judgment that one's life is a good one" (Peterson, 2006, p. 104). In learners, a growth mindset is expressed by the belief that traits and abilities, such as intelligence, are malleable and can be grown through hard work and by viewing difficulties and/or failure as opportunities to learn and improve (Dweck, 2006, p. 15). Similarly, grit is persistent passion and perseverance in the face of difficulties; it is the drive to pursue a superordinate goal regardless of the obstacles (Duckworth & Gross, 2016, p. 4). To sustain a growth mindset and grit, individuals must reject negative ways of thinking and acting and adopt positive thinking strategies.

The curricular backdrop for Thrive Principles enables students to partner with mentors (instructors or faculty advisors) through mastery learning, which values learning and improvement over achievement and performance goals and encourages process-orientation. Learners pursue superordinate goals, their most important career and life goals, by tackling subsets of goals, within individual courses, with perseverance and passion (Wlodkowski & Ginsberg, 2017, pp. 204-205; Kulik, Kulik, & Bangert-Drowns, 1990, p. 265). Some students come to the classroom already possessing these positive character traits, whereas other students find these character traits unfamiliar and strange. Growth mindset and grit have been associated with high academic achievement in the literature. In addition, these character traits benefit learners well beyond the classroom. "A body of research exists, and is being added to daily, that explores what makes students persevere with passion, pursuing difficult challenges, believing they can overcome failure, and desiring opportunities to grow" (Duckworth & Gross, 2014, pp. 1-6; Dweck, 2006, p. 195). By translating these optimal learner attitudes and practices into principles for education, learners have the opportunity to thrive in the higher education classroom and in life.

Values

Positive psychology examines and prescribes practices that help humans to experience a sense of well-being, and Thrive Principles is the application of positive psychology to higher education. "Meaningful work not only promotes learning in the immediate situation, but also promotes a love of learning and resilience in the face of obstacles" (Dweck, 2010). Thrive Principles sets out to implement mastery (attainment-based) learning to help learners achieve academic and life goals, while at the same time, promoting growth mindset and grit through mastery learning's process-oriented experiences and the coaching of a mentor. With mastery

learning, students pursue high levels of learning, through deliberate, effortful practice, and demonstrated by competency assessments, for as long as it takes, until mastery is achieved. Self-efficacy is tested and proven as learners persist through failures and difficulties, and growth mindset and grit are strengthened. Learners' academic goals often underpin career and personal ambitions—their highest goal being the "superordinate goal" (Duckworth & Gross, 2015, p. 1). Ideally, learner coursework creates a path to the learner's superordinate life goal(s), while learning experiences develop positive character traits and skills that can change the learner's outlook on work, play, success, and failure, for a lifetime. The movement toward superordinate life goals and positive character traits should be the focus of both the learner and the mentor. Deliberate, effortful, and purposeful practice, guided by self-reflection and formative feedback contributes to attainment of such goals (Robertson-Kraft & Duckworth, 2014, p. 6; Duckworth, Kirby, Tsukayama, Berstein, & Ericsson, 2011, pp. 174-175).

Building grit and a growth mindset requires learners to be challenged, to work in Vygotky's Zone of Proximal Development (ZPD) (Dweck, 2010). The ZPD describes the learner, working right at the edge of his or her limits, while being supported by a More Knowledgeable Other (MKO) through collaboration and/or scaffolding (Watson & Watson, 2018, p. 99; Hoerr, 2013, p 11). MKOs provide cognitive apprenticeship, or "modeling and coaching [that encourages] a student toward expert performance," in content areas as well as character trait development, like grit and growth mindset (Ertmer & Newby, 1993, p. 58). Learners new to the process or those who struggle with self-efficacy and self-regulation will require more assistance. Pre-assessment and frequent formative evaluations personalize feedback and learning experiences in a mastery-learning context through mentors (Guskey, 2010, p. 5). Coaching from peers serves as an adjunct to cognitive apprenticeships, along with collaborative

learning and teamwork experiences (p. 59; Guskey, 2010, p. 56). As learners progress through content, moving toward mastery, guidance by mentors and peers can be faded out, but collaboration and teamwork should continue. Learners with a growth mindset and a well-developed sense of grit will require less guidance and benefit from more autonomy, in terms of directing their own learning.

Due to the importance of developing mastery in the given content area, as well as developing grit and a growth-mindset, effectiveness is valued over efficiency. Students who don't progress quickly through the competencies are allowed to work at their own self-determined speed because learner choice and personalized pace are necessary for mastery to develop (Bloom, 1968; Kulik, Kulik, & Bangert-Drowns, 1990, p. 265). Similarly, mastery goals are valued over performance goals because "when compared with students in traditionally taught classes, students in well-implemented mastery learning classes consistently reach higher levels of achievement and develop greater confidence in their ability to learn and in themselves as learners" (Guskey, 2010, p. 54). In Thrive Principles, mastery of discipline-dependent content must coordinate with demonstration of growth mindset and grit; both are equally important.

Universal Principles

The instructional intervention described here, Thrive Principles, is grounded in the realm of positive psychology, the discipline that makes a science out of finding the good and trying to multiply and share it (Peterson, 2006, pp. 5-6; Seligman, Ernst, Gillham, Reivich, & Linkins, 2009, pp. 297). Thrive Principles offers design for a positive framework to pursue well-being and improve learning in higher education. Positive research has shown that skills that increase resilience, positive emotion, engagement and meaning can be taught (Seligman, Ernst, Gillham,

Reivich, & Linkins, 2009, p. 293). Learners deserve to experience life and school in an encouraging and optimistic environment for many reasons, including the fact that positive mood in students can increase attention, creativity, and holistic thinking (Seligman, Ernst, Gillham, Reivich, & Linkins, 2009, pp. 293-294).

A crucial aspect to a positive learning environment is the nurturance of a growth mindset among learners and faculty. Well-being is promoted in such an environment, while fostering learning. Learners with a growth mindset value effort, cultivate improvement, and view ability as changeable, all factors that can increase the construction of knowledge (Dweck, 2006, p. 13; Hochanadel & Finamore, 2015). Dweck and Leggett report that a growth mindset is mastery-oriented (1988, p. 259). The opposite way of viewing circumstances is with a fixed mindset. Dweck followed students in a challenging chemistry class and found that, "Students with a fixed mindset stayed interested *only when they did well right away*. Those who found it difficult showed a big drop in their interest and enjoyment. If it wasn't a testimony to their intelligence, they couldn't enjoy it" (Dweck 2006, p. 23). Failure feels devastating to someone with a fixed mindset, and challenges are seen as risks, rather than opportunities. Because learning is all about confronting new challenges, a fixed mindset can be a significant hindrance to students.

Fortunately, research demonstrates that growth mindset can be developed, even if it was once fixed (Blackwell, Trzesniewski, & Dweck, 2007, pp. 259-260; Dweck, 2006, p. 7; O'Rourke, Haimovitz, Ballweber, Dweck, & Popović, 2014). Of all the learning experiences students have while they are in college, the adoption of a growth mindset is very likely to move the student toward well-being in academic, professional, and personal life. Thrive Principles acknowledge that having a growth mindset is important and these behaviors should be expressed and modeled throughout the curriculum, especially through mastery learning, since a growth

orientation is developed through application and experience (Dweck, 2006, p. 7; O'Rourke, Haimovitz, Ballweber, Dweck, & Popović, 2014).

Grit is persisting passion and perseverance exerted toward a goal, over a long period of time, in spite of obstacles, setbacks, and failures. A grit goal isn't just any goal, and grit itself is more than typical intrinsic motivation. A superordinate goal—highly treasured career, academic, or personal goal—is necessary for grit to be expressed, where grit is the ability to continue the pursuit of this valued goal in spite of discouraging circumstances and extreme difficulties (Duckworth & Gross, 2014, p. 4; Hochanadel & Finamore, 2015, p. 49). Obviously, personal commitment like that of "gritty" individuals can be important to academic success. For example, an important component of grit is self-discipline expressed in the form of deliberate practice (regular effectual practice/study with feedback and self-assessment), which fosters learning (Duckworth, Kirby, Tsukayama, Berstein, & Ericsson, 2011, pp. 178-179). Other factors seem to work hand-in-hand with grit to help students persist to the point of success. Grit is related to resilience, self-regulation, self-efficacy, and self-control (Hoerr, 2013, p. 7; Duckworth & Gross, 2016, p. 5; Walters & Hussain, 2015, p. 309). "Meta-analyses of a growing body of educational research suggest that these factors can have just as strong and influence on academic performance and professional attainment as intellectual factors" (Hoerr, 2013, p. 9). Again, grit, like other character traits, can be encouraged in the academic setting, particularly by development of a growth mindset (Hochanadel & Finamore, 2015).

Thrive Principles are set in a competency-based curriculum, where students advance after mastering a set of skills and demonstrating knowledge, rather than moving through a curriculum based on a set time frame. "In competency education, students keep working on specific skills or knowledge until they can demonstrate their understanding and ability to apply them; they then

move to the next material while continuing to use what they have already learned" (Priest, Rudenstine, Weisstein, & Gerwin, 2012). Mastery learning had its beginning with educational researcher and leader, Benjamin Bloom. In 1968, Bloom said, "It is the opinion of this writer that one of the most positive aids to mental health is frequent and objective indications of self-development. Mastery learning can be one of the more powerful sources of mental health" (p. 11). Bloom suggested that as students work to attain mastery, they are likely to increase in perseverance (p. 5). Recent research agrees with Dr. Bloom, in that mastery learning encourages the positive (healthy) traits of growth mindset and grit (passion and perseverance) (O'Rourke, Haimovitz, Ballweber, Dweck, & Popović, 2014, p. 3340; Dweck, 2010; Bloom, 1968)

Bloom articulated three preconditions for mastery learning, which are still important today: (1) objectives should be specified (clearly written competencies); (2) specifications should be translated into evaluation procedures that are clear to learners and faculty (these are today's detailed rubrics); (3) cooperation among students is favored over the competition that is characterized by normative assessments (1968, p. 8; Fuchs, 1995; Huh & Reigeluth, 2018, pp. 23-24). Bloom suggested that education should move away form the traditional grading scale and adopt a "mastery" or "non-mastery" rating for student results on assessments (1968, p. 8). As previously mentioned, learners must be allowed to progress through the curriculum at their own pace. In contrast to the traditional model of advancing at the end of a unit or course, students should move ahead, as soon as they are ready, at any point during the year (Bloom, 1968; Johnstone &Soare, 2014, p. 16; Fuchs, 1995; Guskey, 2010, pp. 54-56). Another suggestion that has stood the test of time, and encourages grit and growth mindset: students failing to achieve mastery on an assessment do not "fail" but receive individualized coaching for improvement and have the opportunity to try again (Bloom, 1968; Johnstone & Soares, 2014, p. 16). Because

students will have something of a personalized learning path, tracking progress toward competency and identifying learners having difficulties, are critical aspects of the coaching or mentoring efforts (Johnstone &Soares, 2014, p. 16).

Situational Principles

Situational principles are created and mediated by the implementation of a mastery curriculum. As discussed in the previous section, when learners fail to demonstrate mastery, they receive an "I" (incomplete) for the particular course until they have demonstrated mastery (Watson & Watson, 2018, p. 96). The "incomplete" is given, rather than a failing grade, which demonstrates faith in the student that they can, and will, attain mastery. This faith is made believable with the investment of a mentor providing encouragement and corrective feedback. On the other end of the spectrum, learners who achieve mastery of competencies quickly should be allowed to progress to the next level, including to the next course (Johnstone & Soares, 2014, p. 16). Alternatively, Bloom suggested providing advanced students with enrichment opportunities (1968, p. 4).

Mastery of content is critical, but Thrive Principles and mastery are interdependently linked with academic and social well-being, particularly growth mindset and grit. In order to expand the ZPD for learners who demonstrate mastery, along with positive behaviors such as growth mindset and grit, should be given more autonomy in terms of directing their own learning (choosing enrichment assignments, developing personal projects, constructing assessments). In Thrive Principles, the mentor is the MKO who will fade guidance, but continue to encourage and advise, as the student shows mastery. Depending upon the course of study, some students may complete "capstone" projects or develop portfolios to complement their competency attainments.

Implementation Issues

Though Thrive Principles would benefit learners tremendously, they are not a good fit in every circumstance, and they may prove to be difficult to implement in others. In some cases, mastery learning has not been adopted as an overall curriculum, but instructors might like to encourage growth mindset and grit (principles that contribute to well-being). Research has clearly shown that learners could benefit from instruction about these positive traits, but they cannot achieve the full benefit apart from the context of mastery learning, which supports the application and experience of grit and growth mindset. Thrive Principles, including mastery learning, grit, and growth mindset, create a particular culture for the institutions involved. In order to make the most of the intervention, faulty and student buy-in is critical. When students lack the desire to use or develop positive character traits, such as growth mindset and grit, Thrive Principles will be compromised. In addition, faculty who lack the desire to use or develop positive character traits, such as growth mindset and grit are unsuitable for teaching Thrive Principles.

Time and money can be considerations when implementing instructional interventions. For institutions that are not mastery learning oriented (or competency based), but plan to implement Thrive Principles, the development of competencies and detailed rubrics for assessment may be costly and time-consuming. Sometimes, higher costs in education have to do with personnel, and limitations in this area can be a constraint for Thrive Principles. When the student to faculty ratio is high, coaching, mentoring, formative assessments and feedback, and tracking of student progress—critical features of Thrive Principles— may be compromised. On the learner end, when students struggle to adapt to mastery learning or fail to demonstrate

competence regularly, extended time to complete coursework may create financial aid issues and delay completion of degree work.

Reflection

Positive Psychology examines and prescribes practices that are scientifically related to a sense of well-being, practices that encourage humans to thrive in their circumstances. “Positive institutions facilitate the development and display of positive traits, which in turn facilitate positive subject experiences” (Peterson, 2006, p. 20). Thrive Principles is an instructional intervention which fosters growth mindset and grit in a mastery learning context in order to create a sense of well-being and self-efficacy for learners in higher education. Learners can be taught to thrive in school, and then to apply that knowledge in the home, the workplace, and the community. A mastery-based curriculum, with coaching by an encouraging mentor, can foster the development of growth mindset and grit, while at the same time, helping learners achieve superordinate career and personal goals. Carol Dweck, who developed the mindset theory gives an excellent example of designing for growth mindset and grit by designing for mastery, “At one high school in Chicago, when students don't master a particular unit of study, they don't receive a failing grade—instead, they get a grade of *Not Yet*. Students are not ashamed of that grade because they know that they're expected to master the material, if not the first time, then the next time, or the next” (Dweck, 2010). Learning is a life-long endeavor, filled with challenges and opportunities. Thrive Principles sets out to teach learners to make a habit of rising to the occasion and enjoying the process.

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