

Connecting Career Theory with Practice: A Cognitive Information Processing Approach

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Evolution of CIP

- Innovation in **brief** and **self-help services** in a university setting--also serving community individuals
- Establishment of the Center for the Study of Technology in Counseling and Career Development (aka The Tech Center) & a research team
- Application of CIP theory to career choice and service delivery



CIP Theory: Basic Sources*

Peterson, G. W., Sampson, J. P. Jr., & Reardon, R. C. (1991). *Career development and services: A cognitive approach*. Pacific Grove, CA: Brooks/Cole.

Peterson, G. W., Sampson, J. P., Jr., Lenz, J. L., & Reardon, R. C. (2002). A cognitive information processing approach in career problem solving and decision making. In D. Brown (Ed.), *Career choice and development* (4th ed., pp. 312-369). San Francisco: Jossey-Bass.

Reardon, R., Lenz, J., Sampson, J., & Peterson, G. (2009). *Career development and planning: A comprehensive approach* (3rd ed.). Mason, OH: Thomson Custom Solutions.

Sampson, J. P., Jr. (2008). *Designing and implementing career programs: A handbook for effective practice*. Broken Arrow, OK: NCDA.

Sampson, J. P., Jr., Reardon, R. C., Peterson, G. W., & Lenz, J. L. (2004). *Career counseling and services: A cognitive information processing approach*. Pacific Grove, CA: Wadsworth-Brooks/Cole.

*More info found at: <http://www.career.fsu.edu/techcenter>

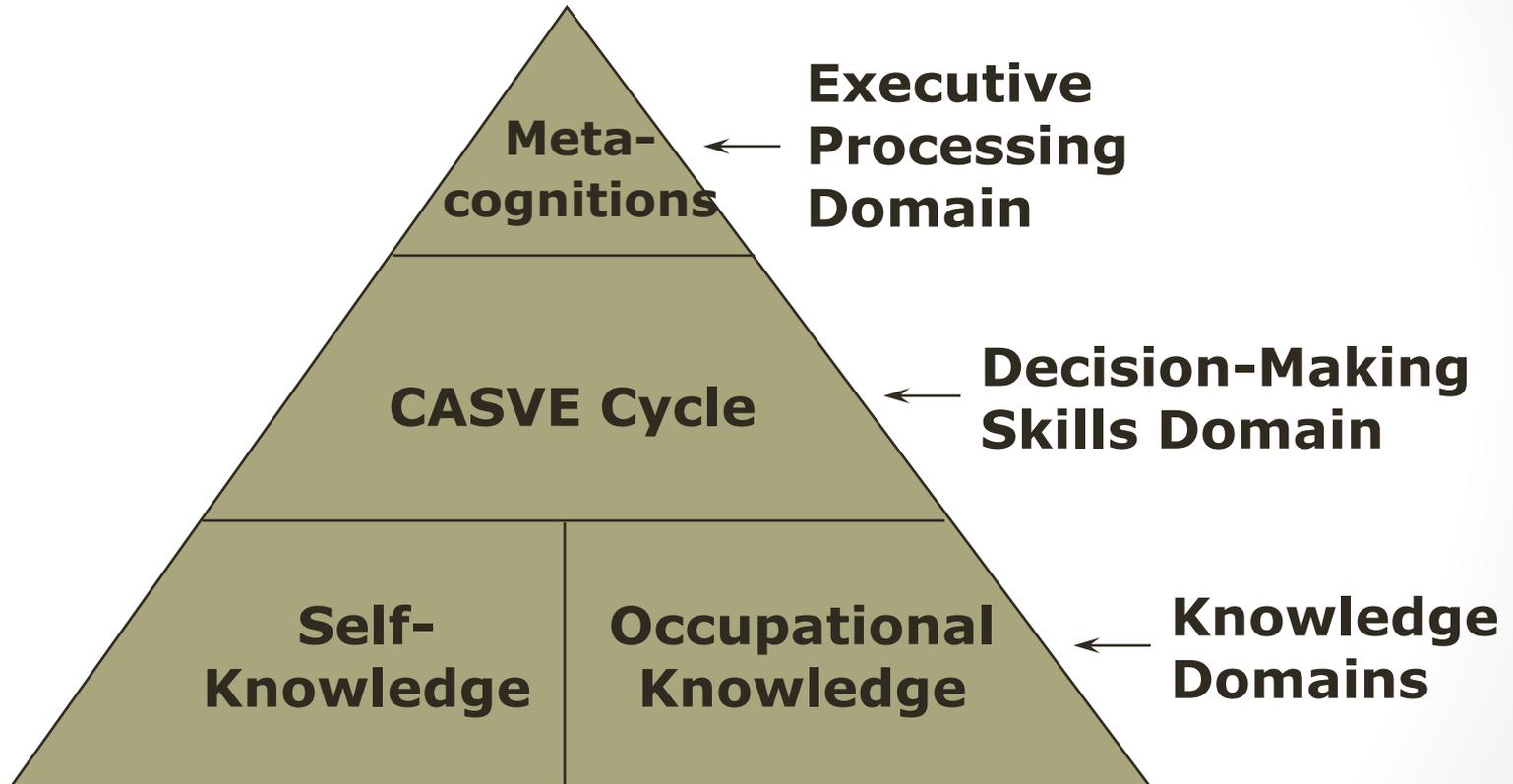
Some Myths About CIP Theory

- is simply a decision-making model with a rational focus
- has only been researched and applied at Florida State
- has not been applied or researched with diverse populations or cultures
- emphasizes cognition/thinking over feelings
- doesn't deal with chance or unplanned events
- focuses solely on the individual, rather than individuals in context

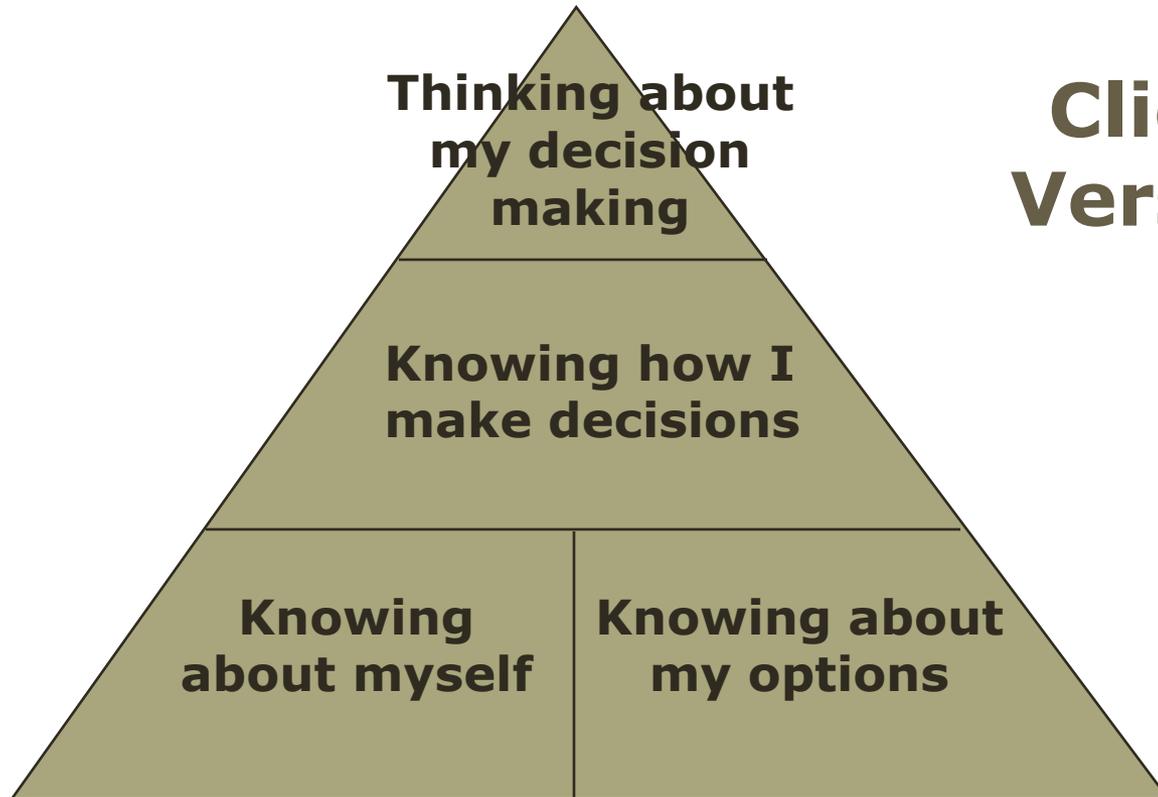
Key CIP Concepts

- Pyramid of Information Processing Domains (**Knowing**)
- CASVE Cycle (**Doing**)
- Readiness for Career Choice Model
- Differentiated Service Delivery Model

Pyramid of Information Processing Domains

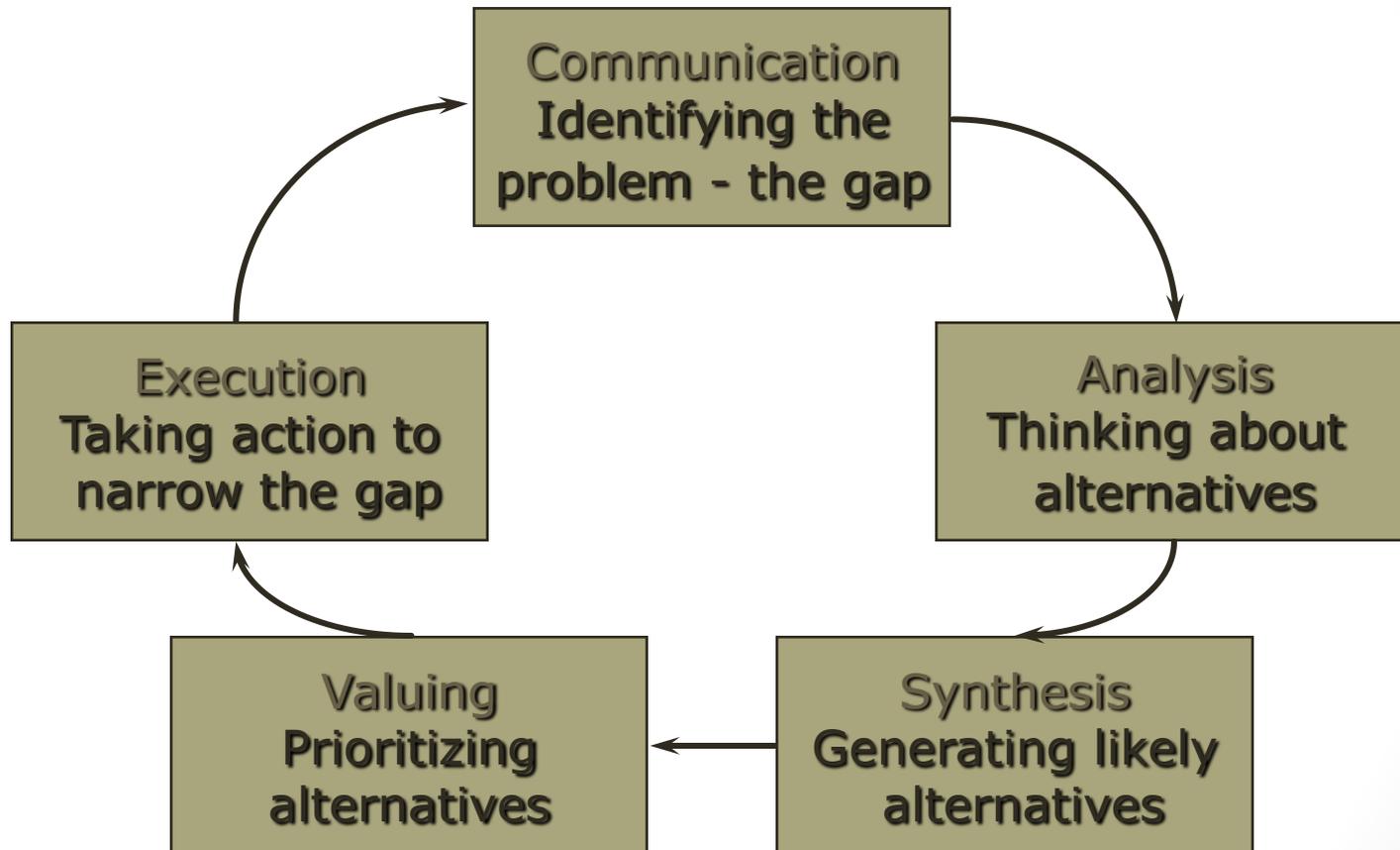


Pyramid of Information Processing Domains

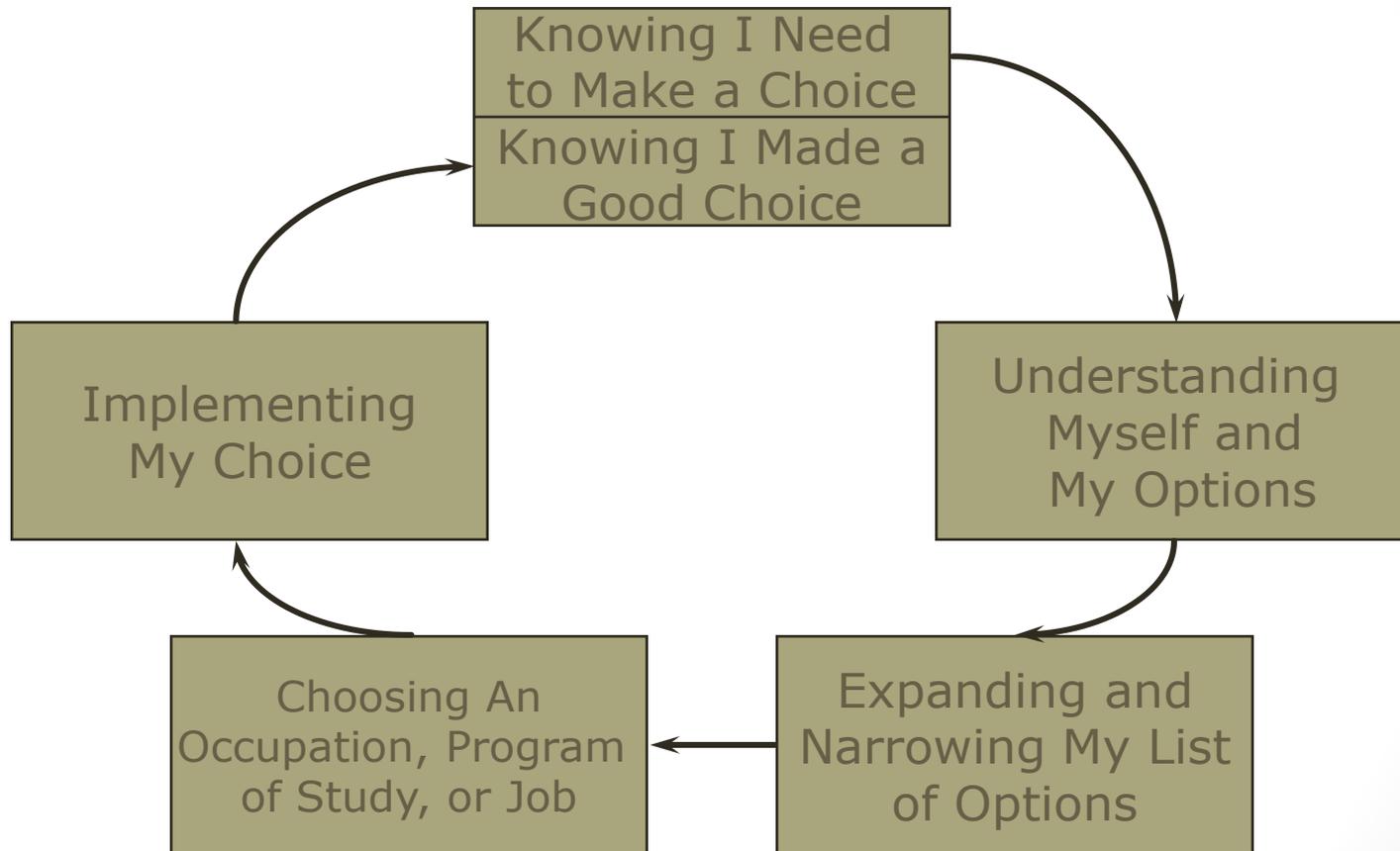


**Client
Version**

CASVE Cycle



CASVE Cycle - Client Version



Translating Concepts for Client Use

- Pyramid
 - What's involved in career choice
 - The content of career choice
 - What you need to know
- The CASVE Cycle
 - A guide to good decision making
 - The process of career choice
 - What you need to do

CIP in Practice

- Focus is on **creating a learning event**
- **Goal:** clients learn how to solve career problems and make decisions
- CIP approach/ concepts can be easily explained to clients



Individual Career Learning Plan

Goal(s): 1. _____
 2. _____
 3. _____

Activity	Purpose / Outcome	Time Needed	Goal #	Priority

This plan can be modified by either party based upon new information learned in the activities of the action plan. The purpose of the plan is to work toward a mutually agreed upon career goal. Activities may be added or subtracted as needed.

Student/Client _____ Date _____ Career Advisor _____ Date _____

CIP in Practice

- CIP provides a concrete application of how practitioners can be trained to apply theory in practice
- Career practitioners agree that CIP can be easily learned and applied
- Evidence of CIP replication in other settings

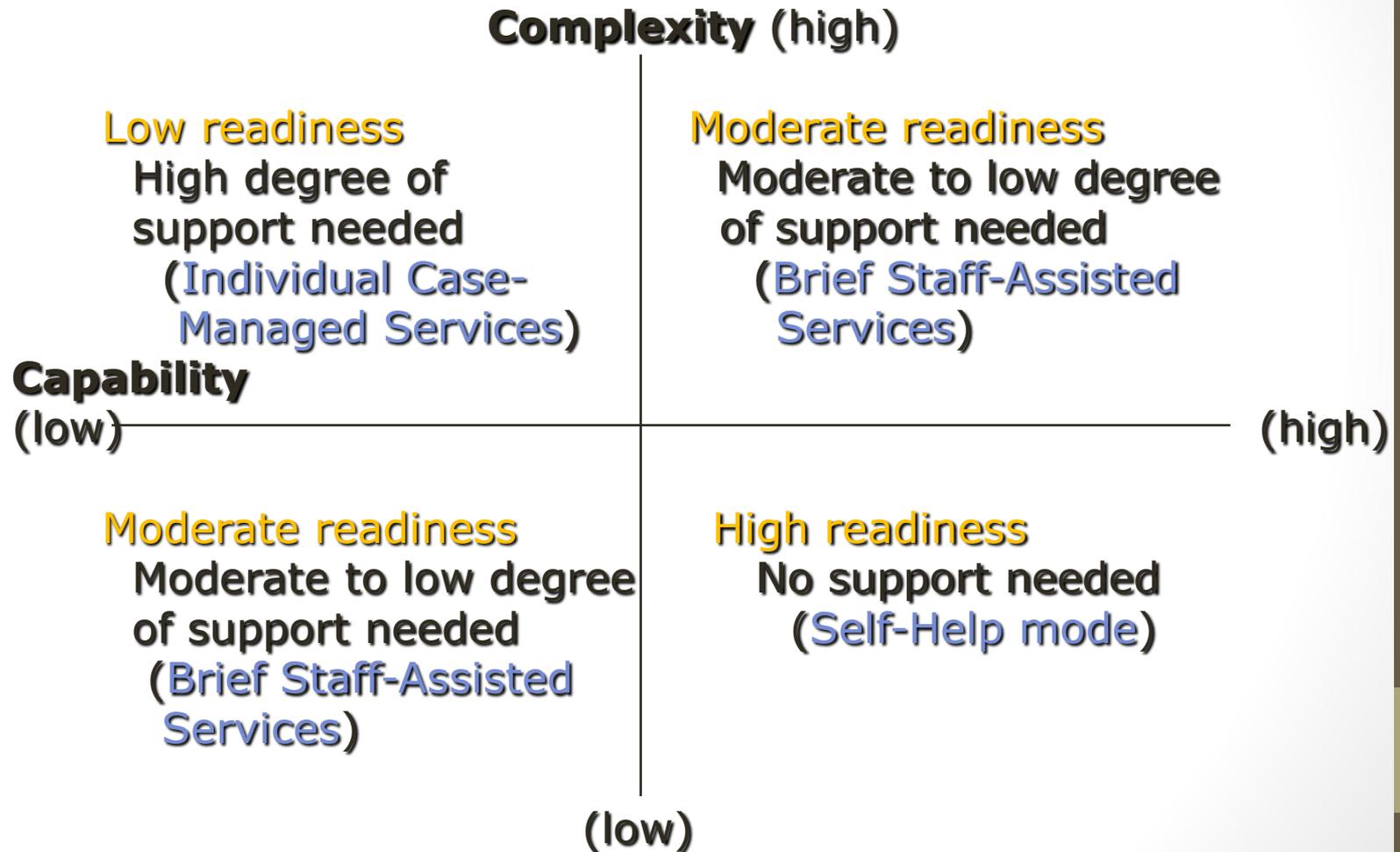


Readiness

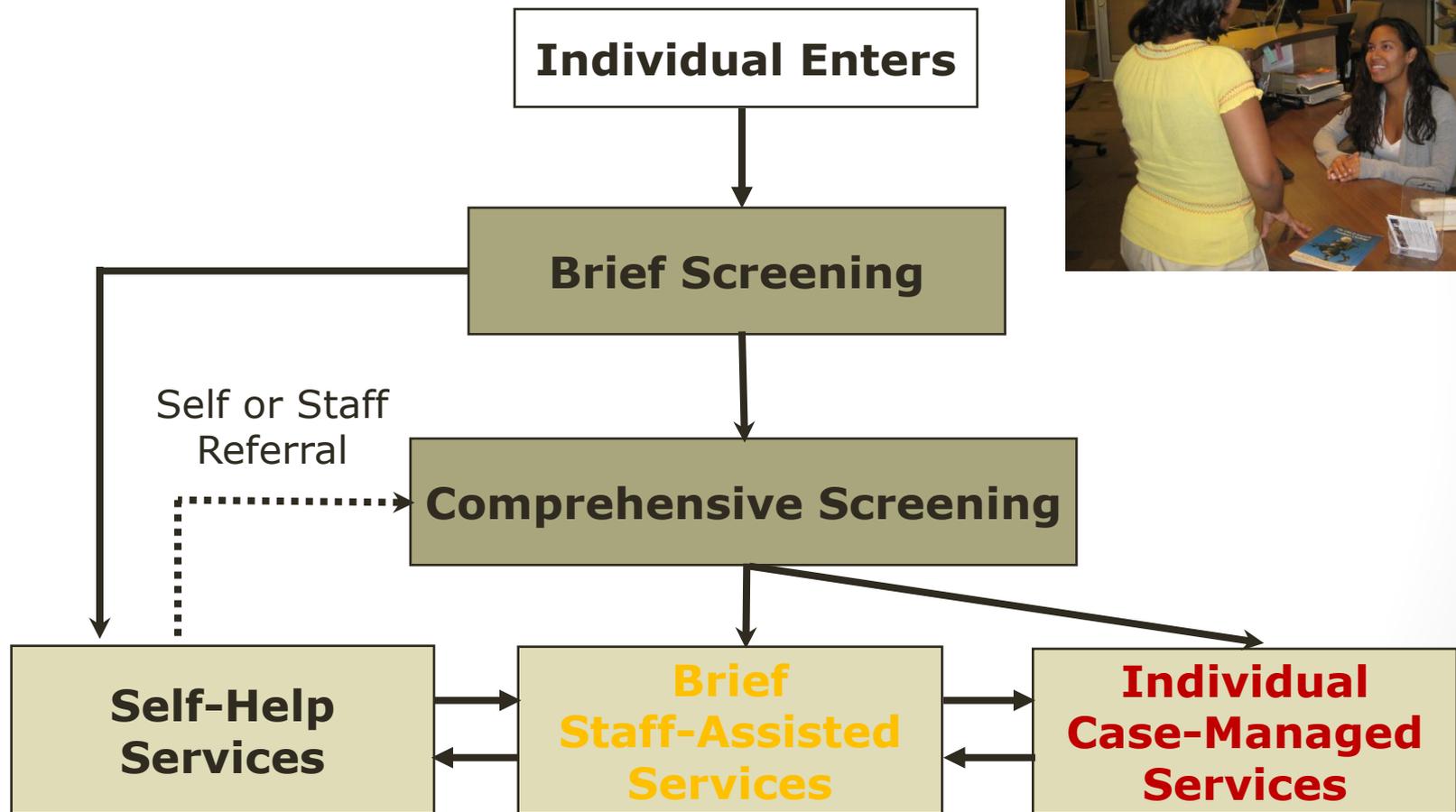
The **capability** of an individual to make appropriate career choices taking into account the **complexity** of family, social, economic, and organizational factors that influence career development

Source: Sampson, J. P., Jr., Reardon, R. C., Peterson, G. W., & Lenz, J. G. (2004). *Career counseling and services: A cognitive information processing approach*. Pacific Grove, CA: Brooks/Cole.

Readiness for Career Choice Model



Differentiated Service Delivery Model



Complete differentiated model of delivering career resources and services

Self Help



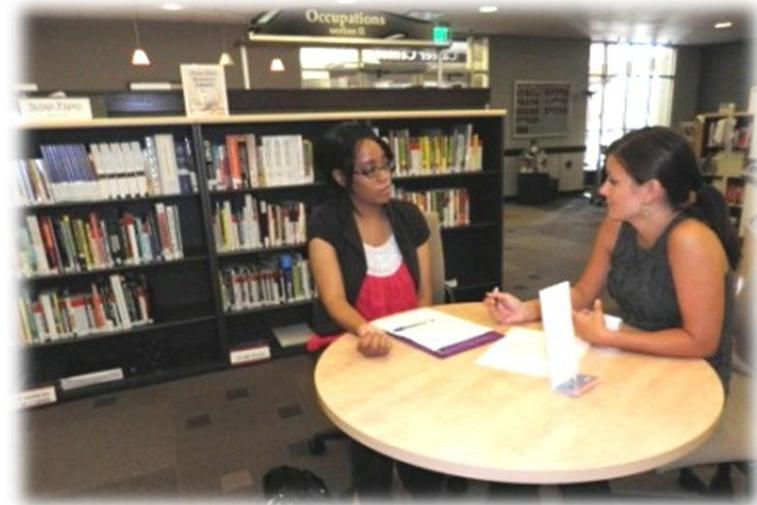
Brief Staff-Assisted



Individual Case-
Managed Services

Use of Assessments in CIP

- Readiness
- Self assessments
- Assessing option knowledge



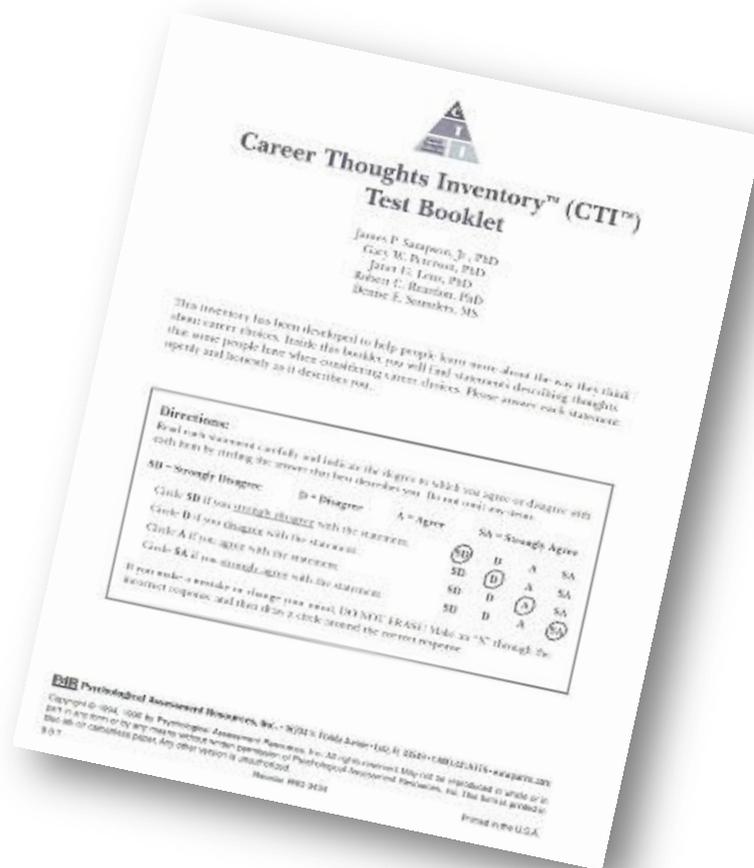
Readiness Assessment

Screening instruments,
e.g.,

Career Thoughts
Inventory (CTI)

Decision Space
Worksheet (DSW)

help determine
readiness for career
choice and **level of**
assistance needed



Purpose of the CTI

Identify individual negative thoughts that impair, impede, or block information processing in career decision making (**item level**)

Locate blocks in CASVE cycle--**construct scales**

- Decision-Making Confusion (DMC), C
- Commitment Anxiety (CA)
- External Conflict (EC)

Measure general state of indecision or confusion (**CTI total score**)

Assessing personal and social context- Decision Space Worksheet (DSW)

Decision Space Worksheet (DSW)

Name _____ Date _____

Decision you are making _____

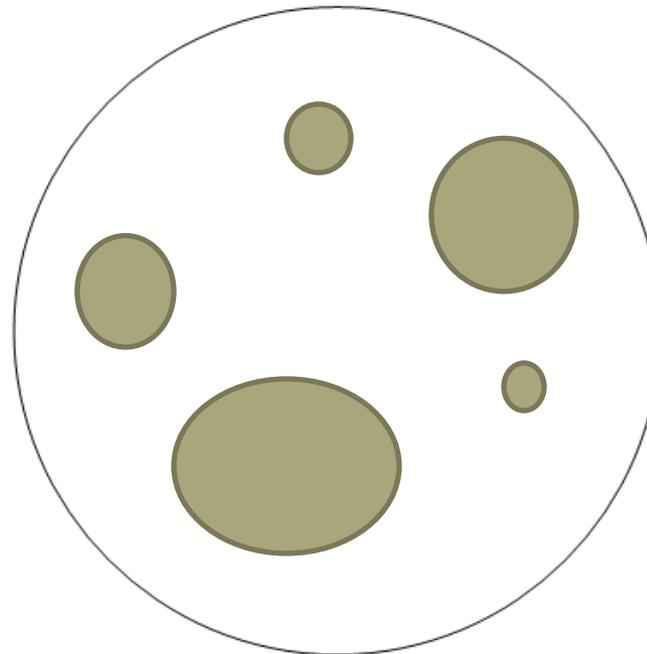
Please list all thoughts, feelings, circumstances, people, or events that bear on the decision you are making.

1. _____
2. _____
3. _____
4. _____
5. _____
6. _____
7. _____
8. _____
9. _____
10. _____

The Decision Space

Directions:

- The large circle below represents the total decision space.
- Within the large circle, draw smaller circles that represent the magnitude or the relative importance of each item listed on the Decision Space Worksheet (DSW).



Purpose of the Decision Space Worksheet (DSW)

- ❖ Cognitive mapping task
- ❖ Helps clients reveal thoughts, feelings, persons, circumstances, etc. associated with the career decision
- ❖ Helps clients prioritize importance of contextual influences
- ❖ Can be used with middle school through college level students and adults

Typical Issues Revealed

Cognitive distortion

Financial

Family

Education

Interests

Self doubt

Employment

Quality of life



Individual Learning Plan

Goal(s) #1 Clarify interests and ascertain readiness for career counseling

#2 Explore options for a graduate degree

#3 Improve peer networking skills at work

#4 Increase social interactions among family members

Activity	Purpose/Outcome	Estimated Time Commitment	Goal #	Priority
Individual career counseling to foster self exploration	Enhance knowledge of self and career options	On-going	1, 2, & 3	1
Complete the Career Thoughts Inventory	Ascertain potential dysfunctional career thoughts	15 minutes	1	2
Complete Self-Directed Search	Enhance self knowledge	45 minutes	1	3
Explore potential graduate degree programs of interest	Enhance knowledge of options	On-going	2	4
Practice interacting with other people at work and in neighborhood	Gain self-observation skills and experience in interactions with peers	On-going	3	5
Schedule session with off-campus counselor for individual and/or family counseling ^a	Improve quality of family relationships related to career choice and support	One week	4	6

Ned

June 9, 2010

Student/Client

Date

^a This activity may be conducted in a career center if counselor possesses skills and appropriate training in mental health/psychological counseling

Issues From DSW Lead to ILP Creation in Collaboration with the Client

CIP/CTI in Individual Counseling

- Allows for a **holistic approach** to the career decision-making process
- Recognizes the **complexity** of career decision making
- Often provides clients with the awareness of things that have kept them “stuck”
- Provides an opportunity to relate this process to other life issues

Connecting CIP Theory and Mental Health Issues

- How are career problem solving and decision making influenced by mental health status?
- Using assessments that bridge career and mental health domains
- How can knowledge of career and mental health issues be used in developing an individualized learning plan?

CIP & Mental Health

- Alleviates stress and anxiety associated with the decision making task
- Can enhance client focus and concentration
- Creates an environment to integrate new understanding of client mental health issues and their impact on career decision-making
- Provides an evidence-based approach for combining career and mental health issues in counseling

Mental health constructs directly correlated with dysfunctional career thoughts

- indecision

- neuroticism

- anxiety

- angry hostility

- depression

- self-consciousness

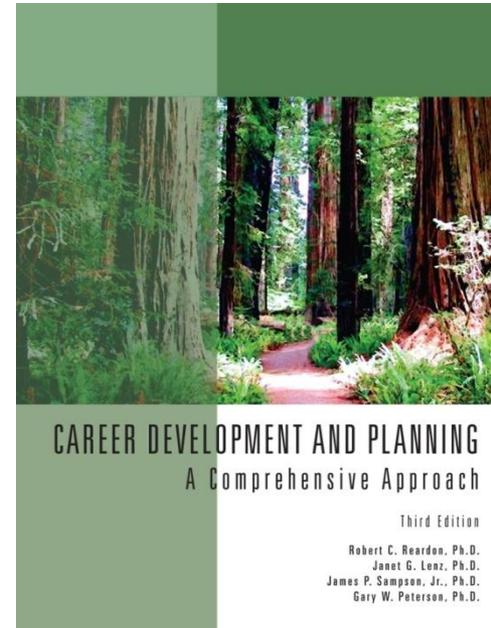
- impulsivity

- vulnerability

Sampson, J. P., Jr., Peterson, G. W., Lenz, J. G., Reardon, R. C., & Saunders, D. E. (1996). *Career Thoughts Inventory: Professional manual*. Odessa, FL: Psychological Assessment Resources, Inc.

CIP in Instruction

- Theory-based undergraduate 3-credit career development class
- CIP integrated into text, class lectures, small group activities
- CTI used as **pre-posttest**
- Studies by Reed et al. (2001) & Osborn et al. (2007) showed significant decreases in students' negative career thoughts



CIP in Program Development

- International applications
- Diverse populations, translation of materials globally
- Visitors from **42 nations** to FSU Career Center/Tech Center

Issues Related to Access

- Theory base for career services impacts access
- **Cost effectiveness** of interventions
- Access is a **social justice** issue
- CIP theory's service delivery approach provides a model for **increasing access**



CIP in Program Development

- Career workshop with Swiss secondary school students:
“CIP approach...can be successfully applied to promote career development on an international scale” (Hirschi & Lage, 2007)
- CIP-based intervention most positive change in career decision making for Icelandic secondary students (Björnsdóttir, 2011)
- Application of CIP to assist service members’ transition into the civilian world (Clemens & Milsom, CDQ, 2008)

CIP in Program Development



Albert Parrillo, guidance counselor in Mechanicsburg, PA, using CIP concepts with a student...

Dr. Parrillo authored a dissertation on *Parental Attachment and Involvement as Predictors of High School Students Career Thoughts*

The 2008 *NCDA Monograph* Highlights Application of CIP Theory in Program Development



CIP Applications in National, State, & Regional Systems for Career Services

- Examples
 - Connexions Services in England
 - Careers Scotland Centres
 - Careers Service in Northern Ireland
 - Workforce Centers in Oklahoma
 - Private Secondary School in Tasmania



Richmond Chambers Careers Service in Northern Ireland



CIP in Workforce Centers

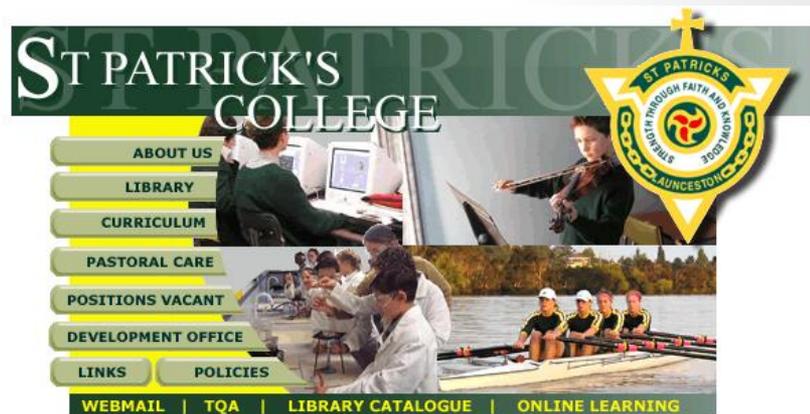
“Because of the **Oklahoma One Stop Career** Centers' effort to address career needs of their ever-increasing number of jobseekers, and their ever-decreasing budgets to maintain staff to facilitate these services, the **CIP model** became the perfect solution to serving their clients' diverse needs. The Workforce Oklahoma Training Institute at the University of Oklahoma collaborated with the state in adapting the model to match their clients' needs whether they were delivered one-on-one, self-help, or staff assisted...

Implementing the **CIP model** changed the culture of how clients perceived the Centers and how staff perceived clients.

Staff roles were transformed to being true helpers rather than providers of information and eliminated much of the traditional paperwork.”

(Director, Workforce Oklahoma Training Institute, University of Oklahoma)

CIP in Tasmania



Hi Janet

Yesterday I gave a presentation at the Career and Transition Education Teachers conference about the socially inclusive career development program at my school.

I stressed that the only way that we have time available to develop career programs for specific disadvantaged groups is because we use CIP's approach to career service delivery. Many attendees were impressed and found the information provided in the workshop to be very practical.....

Regards

Cathy Hughes

CIP in China



Translated for use in CDF training

CIP in Costa Rica

Método cognoscitivo
del procesamiento de información, para
resolver problemas de la carrera

Presentador

Darrin L. Carr, M.S.

Traductora

Susan Epstein, M.L.S.

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Robert Reardon, Ph.D., & Janet Lenz, Ph.D.

Centro para el estudio de la tecnología
en el asesoramiento y
el desarrollo de Carrera

Universidad Estatal de la Florida (FSU),
Estados Unidos de América

Pirámide del Proceso de la Información

Habilidades metacognición

- sensaciones del cuerpo y las emociones
- voz interna
- supervisión y control

Conocimiento de si mismo(a)

- Intereses
- Valores
- Habilidades
- Preferencias del trabajo

Conocimiento de las opciones

- ocupaciones
- programas del estudio
- pasatiempos



6

Applications in University settings

CIP Perspective on Big Questions Facing Vocational Psychology

1. New knowledge should come from varied disciplines and field experience
2. Methods should be developed to transfer extensive knowledge from existing theory and research into practice
3. There are common themes in the global economy that can be informed by career theory and research

Reardon, R., Lenz, J., Sampson, J., & Peterson, G. (2011, in press). *Journal of Career Assessment*

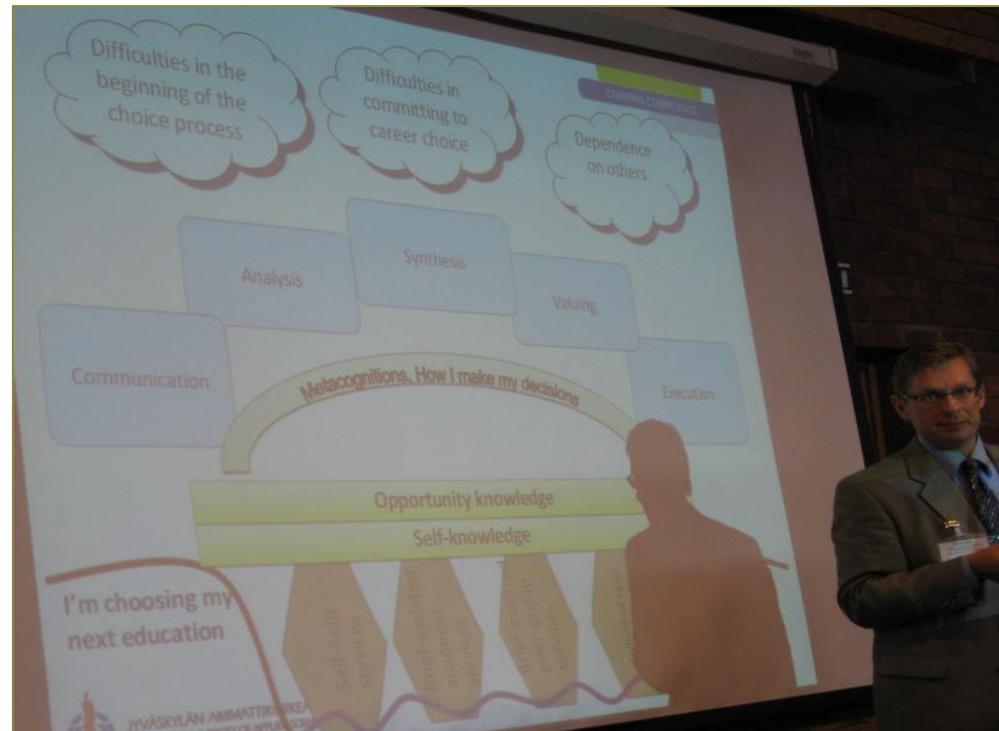
Connecting Research to Practice: Analyzing the CIP/CTI Bibliography

- Citations in 119 refereed journal articles, chapters, and Web publications
- 34 dissertations worldwide (19 Florida State University)
- *CIP applications in service delivery: About 91 references
- *CTI research studies: About 59 references

*Some citations apply in both areas

CIP Research: CTI Translations

- Korean
- Finnish
- Turkish
- Latvian
- Icelandic
- Greek
- Portuguese



Selected CIP Publications & Research 2010-2012

1. Translating career theory to practice: The risk of unintentional social injustice (Sampson et al., 2011, *JCD*)
2. Connecting mental health and career counseling (Lenz et al., 2010, *VISTAS*)
3. Relationships among career and life stress, thoughts, and career decision state (Bullock et al., 2011, *CDQ*)
4. Career interventions and the career thoughts of Pacific Island college students (Thrift et al., 2012, *JCD*)
5. Measurement and development of competence in the use of career assessments (Peterson et al., 2010, *CPADJ*)

CIP Research: In Progress

1. Goal instability in relation to career thoughts and career course behavior
2. Calling, vocational identity, and negative thinking
3. Holland type, goal instability, career thoughts, and vocational identity
4. Negative career thinking and career decision self-efficacy in career exploratory behavior
5. Personality assessment, career decision making, & career thoughts
6. Career thoughts, indecision, and depression: Implications for assessment in career counseling

CIP Research: In Progress (cont.)

7. The relationships among neuroticism, dysfunctional career thoughts, and coping strategies
8. Adapting vs. adopting the CTI in a Finland Polytechnic
9. Relationships among career thoughts, profile elevation, differentiation, career decidedness, and satisfaction with choice
10. Using model-reinforced learning to shape career behavior

CIP Future Directions

- Further convergence of career & mental health counseling (e.g., Decision Space Worksheet, Beck Depression Inventory)
- Spirituality & vocational choice (Valuing)
- Enhanced use of model reinforced learning in ISB
- CTI revisions
- Online delivery of CTI, CTI workbook, and CIP-based interventions

CIP Future Directions

- Further integration of multicultural factors in vocational choice, e.g., the nature of positive family influence on decision making in the Valuing phase of the CASVE Cycle
- Career thoughts in relation to other constructs in vocational behavior, e.g., motivation, self-efficacy, career stress
- Learning from research on CTI translations & use in other countries



CIP Future Directions

Further integration of CIP and other theoretical perspectives, such as Holland's RIASEC theory, Social Cognitive Career Theory (SCCT), Relationship Theory

For More Information

The Career Center @ Florida State University

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[home](#)

Center for the Study of Technology in Counseling and Career Development

Welcome! What brings you here today?

I am an: **Individual** seeking information about my own career and education choices.

Student learning how to design and deliver career resources and services or exploring graduate study at FSU.

Instructor teaching a career development or planning course.

Practitioner delivering career services or creating career resources.

Researcher or program evaluator examining the delivery of career resources and services.

Policy maker or senior administrator interested in the cost-effectiveness of career services.

Developer of computer applications used in the delivery of career resources and services.

What's New

May 2011
[Connecting Holland's Theory to Educational Counseling](#)

[Connecting Career and Mental Health Counseling...](#)

March 2011
[CIP Bibliography](#)

October 2010
[FCA 2010](#)

August 2010
[Distance Counseling Bibliography](#)



www.career.fsu.edu/techcenter